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AT

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VOL. XXVIII.

PLATES.

II.

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COMMANDING.**

IV.

THE CORAL REEFS

OF THE

TROPICAL PACIFIC.

BY ALEXANDER AGASSIZ.

II. — PLATES 106 TO 199.

NIUE TO LADRONES.

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PLATE 106.

UNCLASSIFIED

PLATE 106.

1. Aitutaki seen from the northeast, looking over the barrier reef.
2. Terraces on the west shore of Niue, north of Avatele.
3. Bare, pitted and honeycombed terraces on the southwest point of Niue.
1, 2, W. McM. W.; 3, A. G. M., Phot.



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PLATE 107.

PLATE 107.

NICE.

1. Terraces on the southwest face of the island.
2. Buttresses of elevated coralliferous limestone, near Alofi landing.

1, 2, A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 107.



1



HELIOTYPE CO., BOSTON.

2

PLATE 108.

PLATE 108.

NIUE.

1. Buttresses on the west face of the island, north of Alofi landing.
 2. Buttresses on the west face of the island, looking south of Alofi landing.
- 1, 2, W. McM. W., Phot.



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HELIOTYPE CO., BOSTON.

PLATE 109.

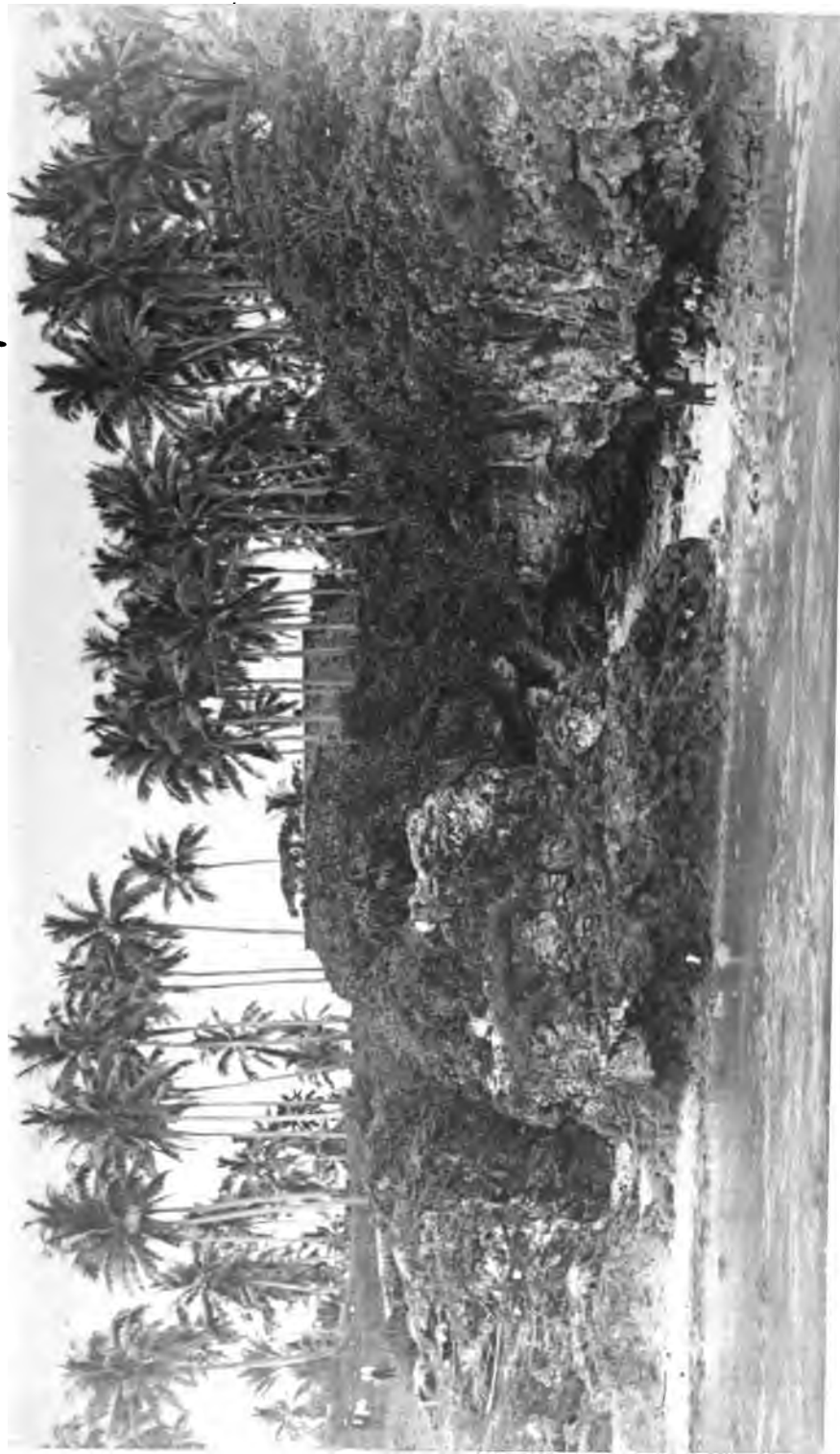
PLATE 109.

Buttresses of elevated coralliferous limestone on the west face of Niue, near Alofi landing.

A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 109.



HELIOTYPE CO., BOSTON.



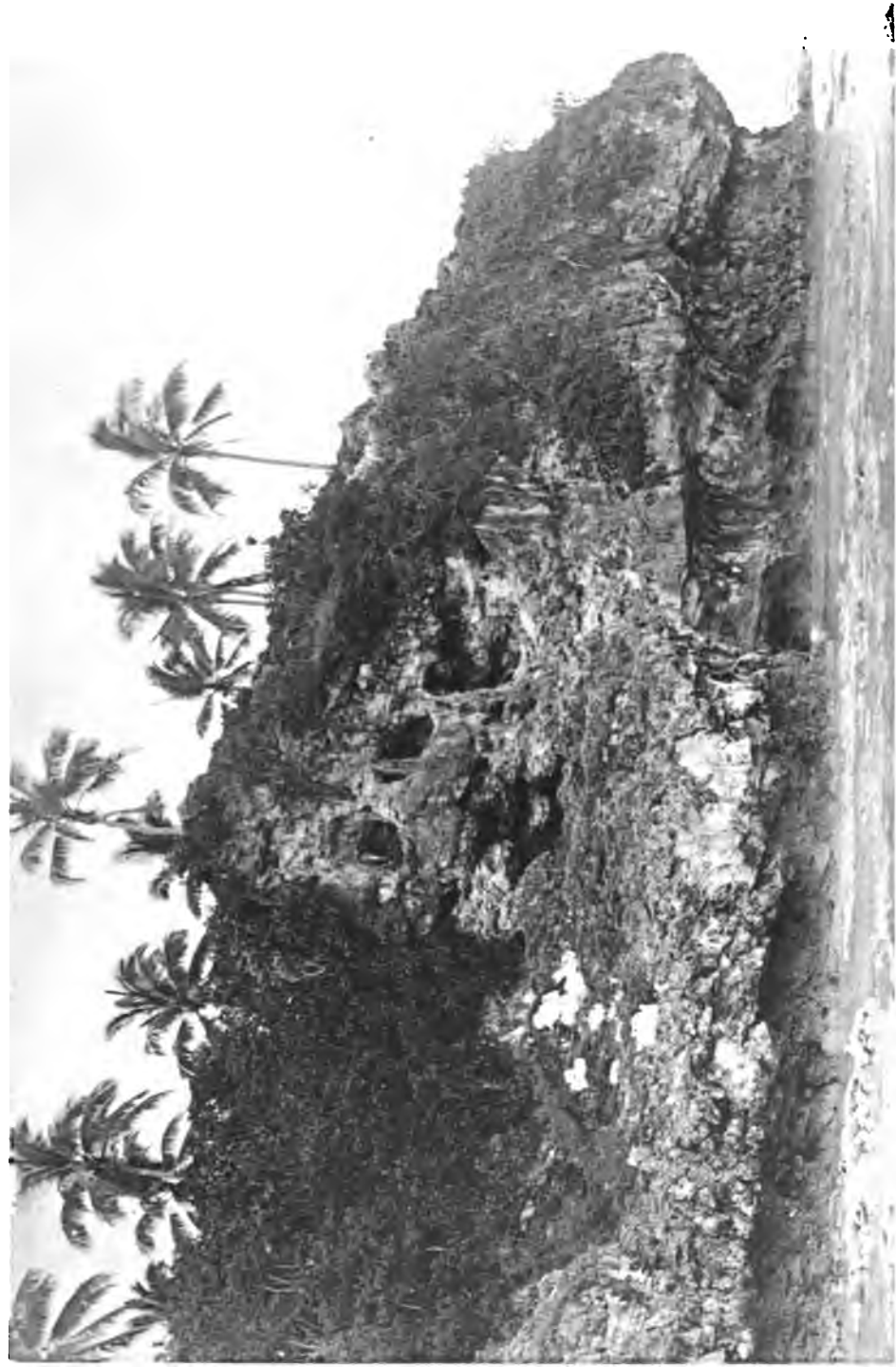
PLATE 110.

PLATE 110.

Undercut and elevated coralliferous limestone cliffs on the west face of Niue, riddled with caverns and partly covered by stalactites, near Alofi landing. W. McM. W., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 110.



HELIOTYPE CO., BOSTON.

PLATE 111.

PLATE 111.

EUA.

1. Indistinct terraces on the west side of the island, south of Ohonua. A. G. M., Phot.
2. East face of the island looking south from near the north point.
3. Cliffs of elevated coralliferous limestone on the north point of the island seen from the east.

2, 3, W. McM. W., Phot.

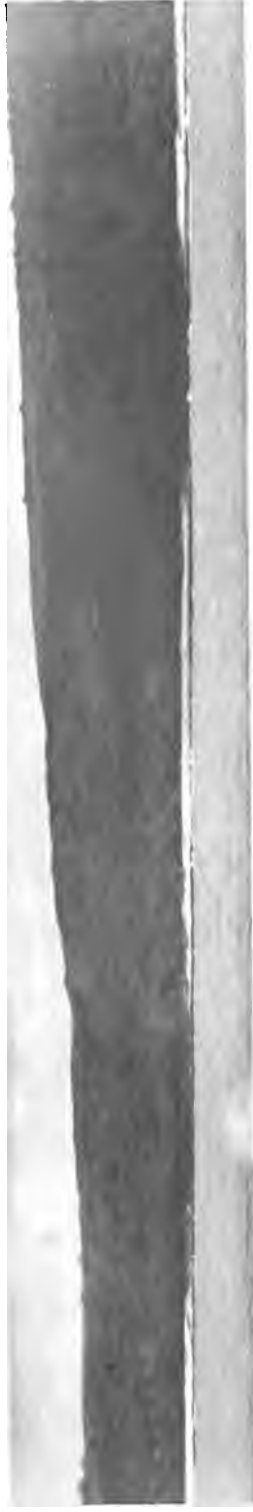


PLATE 112.

PLATE 112.

EUA.

1. Cliffs and terraces on the east face of the island, near the north point.
2. Cliffs and terraces with lines of caverns and stalactites, on the east face of the island, about three miles south of the north point. Five terraces can be distinguished.

1, 2, A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 112.



HELIOTYPE CO., BOSTON.



PLATE 113.

PLATE 113.

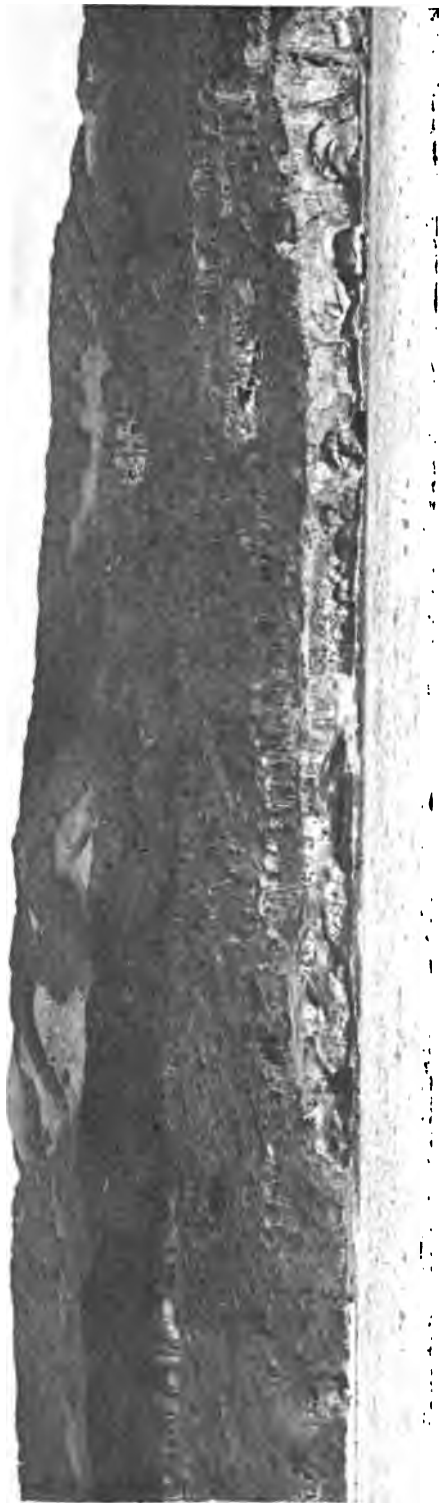
EUA.

- 1. Undercut cliffs with lines of caverns and terraces, near the central and highest part of the east face of the island.**
- 2. Elevated coralliferous limestone cliffs on the east face of the island. Fig. 2 follows Fig. 1, south.**

1, 2, A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 113.



HELIOTYPE CO., BOSTON.



PLATE 113.

PLATE 114

EUA.

1. Looking from the summit of the western ridge of the island towards the gap near the landing place on the west side, across the central valley to the northern part of the eastern ridge.
2. Looking eastward, from the third terrace on the western ridge, across the central valley towards the southern part of the eastern ridge; peaks of the fifth or sixth terrace on the right.
3. From the same point as Fig. 2, looking east, across the central valley, towards the middle of the eastern ridge.

1 3, W. McM. W., Phot.



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PLATE 115.

PLATE 115.

TONGAREVA

1. Entering the harbor of Nukunono looking south into the gap between Nukuleka and Hileva.
2. Fanga Kiriia sail on lagoon south of Nukunono.
3. Looking east from the landing at Nukunono towards Paogimotu, Makabaa, Veitoo, and Faka. Natives fishing on the lagoon.

L. L. W. McM. W. Photo.



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HELIOTYPE CO., BOSTON.

3

PLATE 116.

PLATE 26

PLATE 26

1. Lagoon shore to the east of Natchez
2. Elevated limestone cliffs at the southern base of the sand
dune at Natchez



1



2

HELIO TYPE CO., BOSTON.

PLATE 116.

PLATE 116.

TONGATÁBU.

1. Lagoon shore to the east of Nukualofa.
2. Elevated limestone cliffs on the southwest face of the island.

1, 2, Martin, Phot.



1



2

HELIO TYPE CO., BOSTON.

PLATE 117.

PLATE 117.

TONGATÁBU.

1. Blow holes on the outer edge of the reef flat platform at Houma Toloa, south point of the island (Cook's Point).
2. Undercut cliffs of elevated coralliferous limestone with lines of caverns and stalactites, on the Liku, or windward face of the island.

1, 2, Martin, Phot.



1



2

HELIO TYPE CO., BOSTON.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 119.



1



MELIOTYPE CO., BOSTON.

2



PLATE 120.



"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 120.



1



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HELIOTYPE CO., BOSTON.

PLATE 120.

PLATE 120.

VAVAU.

1. Looking northeast into the passage leading to the harbor of Neiafu, from off Fata Point.
2. Limestone bluffs to the south of Maitoulo Point on the west shore of Vavau, Houmafakalele Point in the distance, seen from the west. W. McM. W., Phot.
3. Looking east across Neiafu Neck towards the islands on the east face of Vavau.
1, 3, A. G. M., Phot.



1



2



3



PLATE 121.

PLATE 121

VAVAU.

1. The west face of Hunga Island seen from the north, off the entrance to Vavau (Faihava).
2. Elevated coralliferous limestone cliffs and terraces to the east of Fata Point.
3. Neiafu Harbor, Talau and Moungalafa terraces seen from Holobeka.

1, 2, W. McM. W., Phot.



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3



PLATE 122.

PLATE 122

1. Off the Talau, looking southeast towards Moungalafa (Vavau).
2. A corner of Vavau Harbor seen from the Talau. Martin, Phot.
3. Vegetation along the road on the summit of the third terrace, western ridge of Eua.
1, 3, W. McM. W., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 122.



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HELIOTYPE CO., BOSTON.

PLATE 121

VAVAU

1. The west face of Hunga Island seen from the north off the entrance to Vavau
 (Fanava).
2. Elevated coral-terrace limestone cliffs and terraces to the east of Fata Point.
3. Neiafu Harbor. Takau and Mounyalafa terraces seen from Hoi leka.

1, 2, W. M. M. W. Photo.



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PLATE 122.



PLATE 124.

PLATE 124

VAVAU.

1. Elevated coralliferous limestone cliffs on the north side of Vavau. Martin. Phot.
2. Looking down upon the cliffs at Matakina Point, seen from the east.

W. McM. W., Phot.



1



2

HELIO TYPE CO., BOSTON.



PLATE 125.

PLATE 125.

Limestone bluffs on the north side of Vavau. Martin, Phot.



1



2

HELIO TYPE CO., BOSTON.

PLATE 125.

PLATE 125.

Limestone bluffs on the north side of Vavau. Martin, Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 125.



HELIOTYPE CO., BOSTON.

PLATE 126.

PLATE 126.

KAMBARA.

1. Inner slope of the rim of the sink on the southwestern face of the island. The slope in the foreground is composed of volcanic rocks; the rim in the background is made up of elevated limestone.
2. Looking east across the sink of the island, from the summit of the volcanic hill on the west side of the island.

1, 2, W. McM. W., Phot.



1



2

MELIOTYPE CO., BOSTON.

PLATE 127.

PLATE 127.

KAMBARA.

1. Looking northeast across the sink of the island, from the summit of the volcanic hill on the west face. Wangava in the distance.
2. Gap on the west face of the island, at the junction of the volcanic hill and of the elevated coralliferous limestone rim of the island. Wangava in the distance.

1, 2, W. McM. W., Phot.



1



2

HELIO TYPE CO., BOSTON.

PLATE 128.

PLATE 128.

1. A bend in the Rewa, southern face of Viti Levu.
2. Ba River, northern face of Viti Levu.
3. Volcanic islet, an outlier on the reef flat platform of the northern face of Rotumah.



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2



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HELIO TYPE CO., BOSTON.

PLATE 129.

PLATE 129.

1. South end of Nurakita (Ellice Islands), looking west.
2. Nukufetau seen approaching it from the south.
3. Looking across the east face of the northern part of Nukufetau atoll.
4. The Motungie Islands at the southern extremity of the atoll of Funafuti.

1, 3, A. G. M.; 2, 4, W. McM. W., Phot.



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4

PLATE 130.

PLATE 130.

FUNAFUTI.

1. Gap on the east face of the atoll between Telele and Funafara; the islands of Tutanga and Falaoingo in the rear.
2. Gap on the east face of the atoll between Funafara and Lua Motu. In the distance is seen Tefala Island.
3. Gap on the east face of the atoll between the north end of Lua Motu and Mateika.
4. Northern extremity of Funamanu islet, on the east face of the atoll.

1, 2, W. McM. W.; 3, 4, A. G. M., Phot.



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4

• **PLATE 131.**

PLATE 131.

FUNAFUTI.

1. South end of Funafuti Island, with submerged reef to the south of Matafuana.
2. Northeast face of the atoll, showing Amatuku and Mulitefala Islands.
3. Gap between Amatuku and Mulitefala south of the northern entrance to the atoll; the island of Tebuka is seen in the distance through the gap, and to the right Fualifeke.
4. Te Afualiku, sand key north of the entrance, seen when approaching the southern horn of the north passage.

1, 2, A. G. M.; 3, 4, W. McM. W., Phot.



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4

PLATE 132.

PLATE 132.

FUNAFUTI.

1. Lagoon beach at Fongafale seen from the anchorage.
2. Sea face of the island north of the boring station north of Fongafale village.
1, 2, A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 132.



1



2

HELIOTYPE CO., BOSTON.

PLATE 133.

PLATE 133.

FUNAFUTI.

1. Elevated recent reef rock conglomerate on the lagoon side of the northern part of Amatuku.
2. Gap between Funafuti and Tengako covered with rubble and coarse shingle, Tebuka Island in the distance.

1, 2, A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 133.



1



2

HELIOTYPE CO., BOSTON.

PLATE 134.

PLATE 134.

FUNAFUTI.

1. Northern extremity of Amatuku, looking towards Mulitefala. W. McM. W., Phot.
2. Looking north from the northern extremity of Amatuku towards the northern end of Mulitefala. A. G. M., Phot.





PLATE 135.

PLATE 135.

FUNAFUTI.

1. Sea face, northern end of Tengako, looking north, Amatuku in the distance.
2. Eroded sea face platform, eroded elevated beach rock, and reef rock outliers at the north end of Funafuti Island.

1, 2, W. McM. W., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 135.



1



2

HELIOTYPE CO., BOSTON.

PLATE 135.

PLATE 136.

FUNAFUTI.

1. Sea face on the northern part of Tengako, with elevated reef rock outliers.
2. Looking towards Amatuku on the sea face of the north point of Tengako. Reef flat platform covered with beach rock and reef rock slabs and boulders.

1, 2, W. McM. W., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 136.



1



2

HELIOTYPE CO., BOSTON.



PLATE 137.

PLATE 137.

FUNAFUTI.

1. Southern part of Taiisale, the secondary lagoon to the east of Fongafale village.
2. Northern part of Taiisale.
3. Northern part of Taiisale near the Borehole.

1-3, W. McM. W., Phot.



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2



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HELIO TYPE CO., BOSTON.

PLATE 138.

PLATE 138.

TAPETEUEA.

1. Narrow island on the east face of the atoll, towards the northern part.
2. Islands, islets, and bars south of the central part on the east face of the atoll.
3. East face of the long island near the north end of the atoll.
4. Islands on the east face of the northeastern part of Apamama.

1-4, W. McM. W., Phot.



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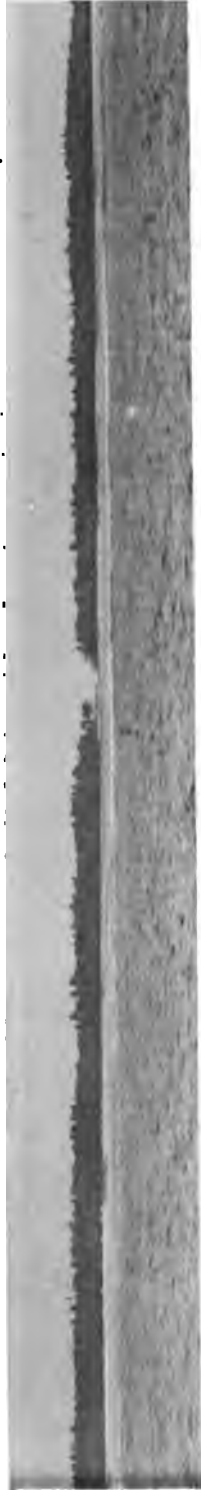
PLATE 139.

PLATE 139.

APAMAMA.

1. Gap between two islands on the east face of the atoll.
2. Bay in the large island on the east face of the atoll.
3. Sea face of island on the south side of the atoll.
4. Reef flat platform lagoon on the east face about two miles from the southern point of Maiana.

1-4, W. McM. W., Phot.



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4

PLATE 140.

PLATE 140.

1. Narrow part of land rim of Maiana near the point of the eastern horn of the atoll.

TARAWA.

2. Islands and islets on the east face of the atoll.
3. Looking from the sea into gap between islands on the east face of the atoll.
4. Looking from the sea into gap and bay between islands on the south face of the atoll.

1-4, W. McM. W., Phot.



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4

HELIOTYPE CO., BOSTON.

PLATE 141.

PLATE 141.

TARAWA.

1. Sea face of island on the south side of the atoll.
2. Islands, islets, and bars on the south face of the atoll.
3. Islands, islets, bars and secondary lagoon on the reef flat on the south side of the atoll.
4. A similar view with islands of the east face of the atoll in the distance.

1, 2, A. G. M.; 3, 4, W. McM. W., Phot.

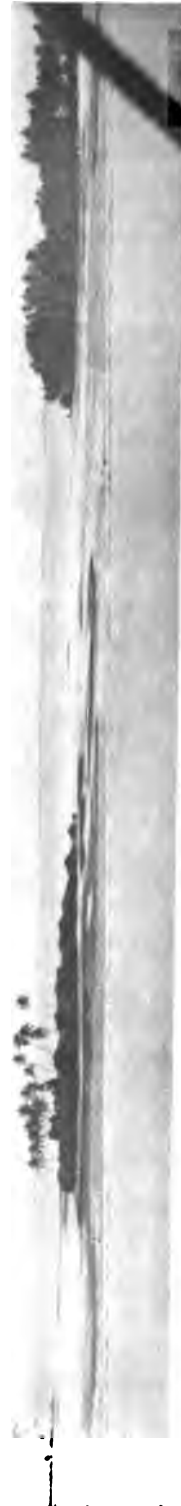
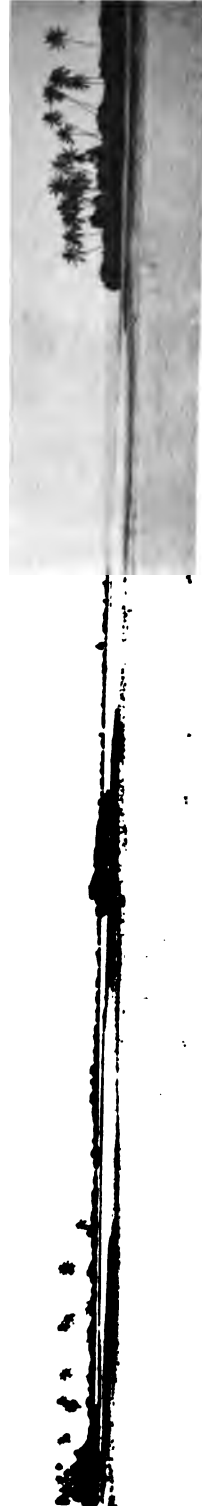


PLATE 142.

PLATE 142.

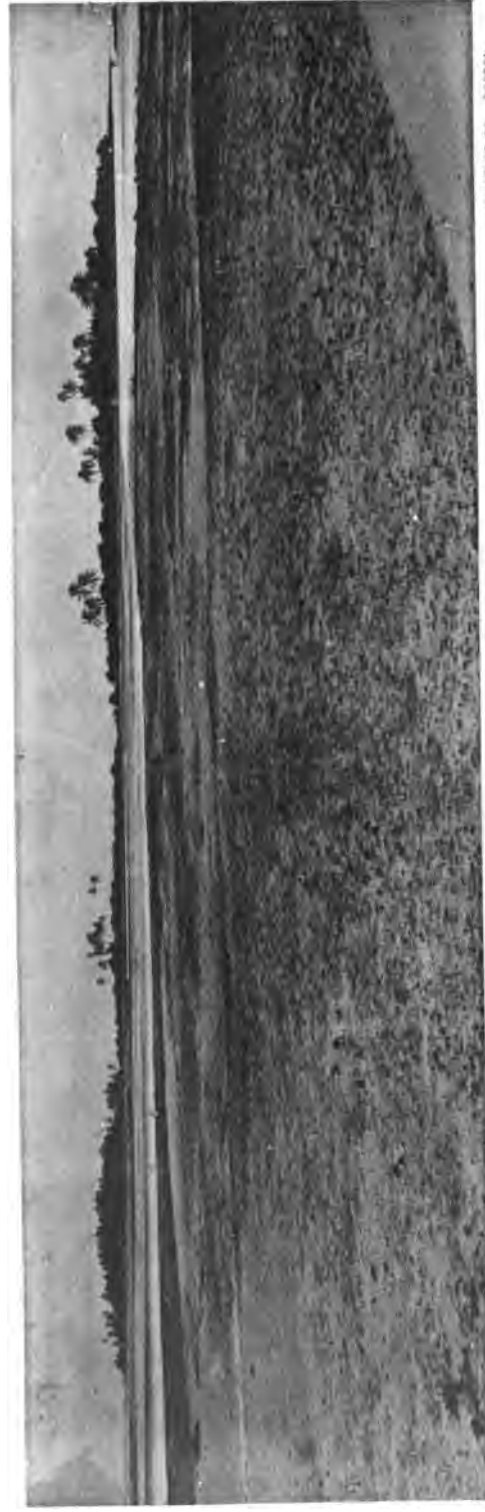
TARAWA.

1. Lagoon shore and flat, looking south.
- 2 Lagoon side of islands and flat in rear of village.
1, 2, W. McM. W., Phot.

"Albatross" Tropical Pacific Expedition.



1



HELOTYPE CO., BOSTON.

2

Coral Reefs, PLATE 142.



PLATE 143.

PLATE 143.

TARAWA.

1. Looking west along the lagoon shore, over the flat.
2. Sink in the lagoon, near the village.

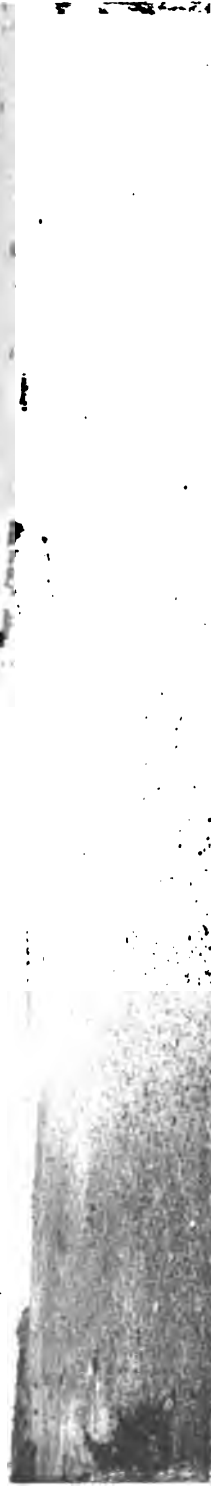
1, 2, W. McM. W., Phot.

'Albatross' Tropical Pacific Expedition.

Coral Reefs, PLATE 143.



1



2

HELOTYPE CO., BOSTON.

PLATE 144.

PLATE 144.

TARAWA.

1. Sink in the lagoon, looking towards the village.
2. Lagoon side of the .atoll, looking north along the sink.

1, 2, W. McM. W., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 144.



1



2

HELIOTYPE CO., BOSTON.

PLATE 145.

PLATE 145.

1. Looking into the lagoon across the gap north of the small island, at the north point of Apaiang.
2. Southeast horn of Apaiang seen from the south.
3. Sea face of island on the south face of Apaiang.
4. Sink in the lagoon of Tarawa, near the village, looking north. *

1-3, W. McM. W.; 4, A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.



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4

HELIOTYPE CO., BOSTON.

Coral Reefs, PLATE 145.

PLATE 146.

PLATE 146.

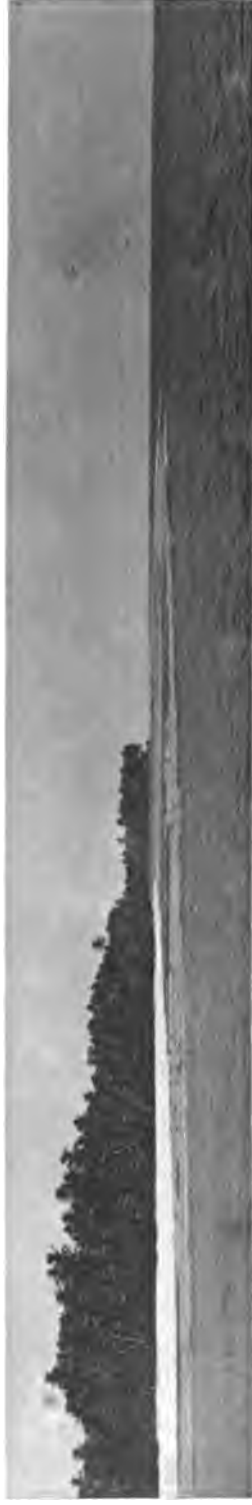
MARAKI.

1. Entrance into the lagoon, west face of the atoll.
2. South point of the atoll, looking northeast.
3. High sand beach and wide reef flat, on the north point of the west face of the atoll.

1-3, A. G. M., Phot.



1



2



3

PLATE 147.

PLATE 147.

MARAKI.

1. Steep sand and shingle beach and wide steep reef flat, on the west face of the atoll near trader's house, north of entrance to the atoll.
2. Steep shingle and boulder beach north of Fig. 1, reef flat very narrow.

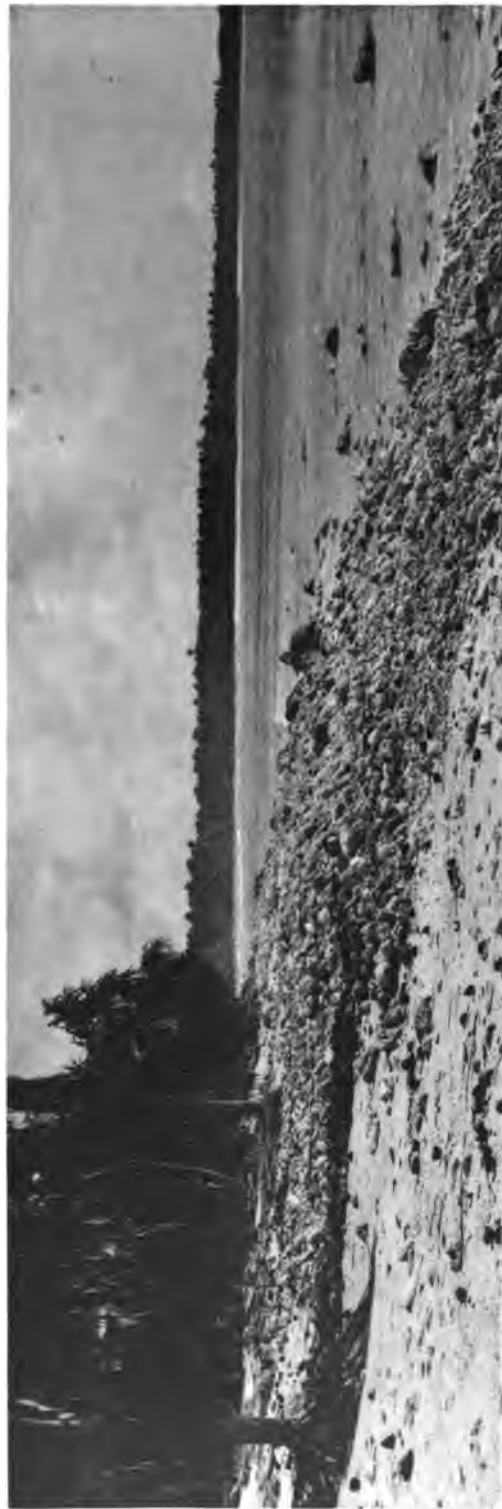
1, 2, A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 147.



1



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HELIOTYPE CO., BOSTON.

PLATE 148.

PLATE 148.

MARAKI.

1. Looking into the lagoon over the narrow land rim on the south face of the atoll, high sand beach and narrow reef flat; land rim of the east face seen in the distance.
2. Another view of the same land rim, somewhat more to the westward; land rim of the east face seen in the distance.

1, 2, W. McM. W., Phot.



1



2

PLATE 149.

PLATE 149.

MARAKI.

1. Looking through a gap across the lagoon over the narrow land rim of the southern face of the atoll, the eastern land rim seen in the distance; the secondary land rim in the middle ground. W. McM. W., Phot.
2. Secondary land rim on the outer edge of the lagoon flat and secondary lagoon; a second line of islands will form the third land rim; the east face of the atoll seen in the distance. A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 149.



1



2

HELIOTYPE CO., BOSTON.

PLATE 150.

PLATE 150.

MARAKI.

1. Looking over the low land rim on the southwest horn of the atoll, across the lagoon towards the land rim of the east face. W. McM. W., Phot.
2. Bars and secondary land rim, with lagoon flat, looking north along the lagoon face of the western land rim. A. G. M., Phot.



PLATE 151.

PLATE 151.

TARITARI.

1. Flat to the west of Butaritari, looking towards Passage Point.
2. Flat to the east of Butaritari, looking northeast.
3. Saud flats off Butaritari, between the anchorage and the shore.
4. Eastern horn of Taritari, south of the gap between the villages of Keuea and Tanimaiaki.

1, 2, W. McM. W.; 3, 4, A. G. M., Phot.



2



3



HELIOTYPE CO., BOSTON.

4

PLATE 152.

PLATE 152.

TARITARI.

1. Looking north through the gap (Pl. 151, fig. 4), in the centre of the southeast face of the atoll.
2. Islet in the same gap (Keuea gap), showing lines of beach rock boulders and slabs, running at right angles to the sea face.
3. Bay on the sea face of the land rim to the west of Tanimaiaki village.
4. Looking through a narrow gap on the sea face of the land rim of Butaritari Island about one mile west of Tanimaiaki village.

1, 2, 4, W. McM. W.; 3, A. G. M., Phot.

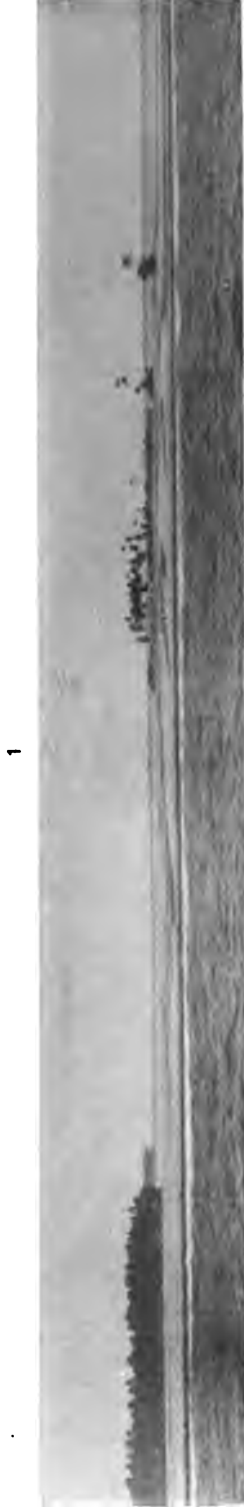




PLATE 153.

PLATE 153.

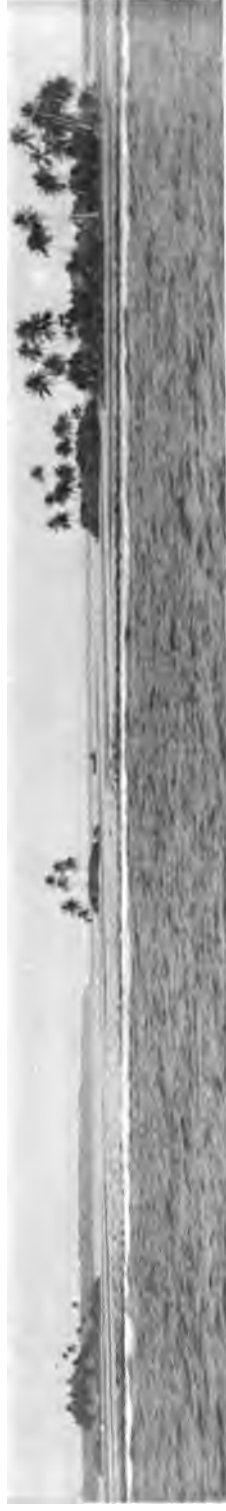
TARITARI.

1. Islands and islets on the flats of Keuea gap, covered with cocoanut trees, flanked by beach rock boulder beaches, seen from the sea face.
2. Other islands in the same gap, seen from the sea face, looking towards Butaritari.
3. Islets with beach rock and shingle bars, adjoining the point south of Keuea village.

1-3, A. G. M., Phot.



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PLATE 154.

PLATE 154.

TARITARI.

1. Entrance islet on the south face of the southwestern passage.
2. Sea face of point of Butaritari Island, north of Ukiāññāñ village.
3. Sea face of the western Pikhāt Island, on the northwestern horn of the atoll, showing the passage between it and eastern Pikhāt Island.
4. Steep boulder beach on the sea face of Butaritari Island, north of Ukiāññāñ village.

1, 3, W. McM. W.; 2, 4, A. G. M., Phot.



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HELIO TYPE CO., BOSTON.

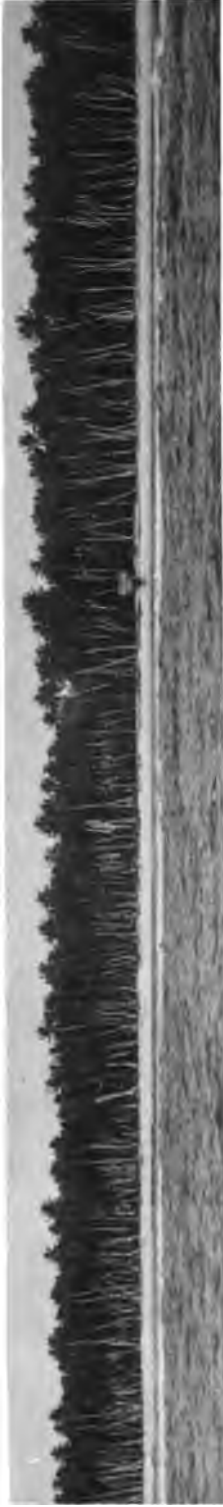
PLATE 155.

PLATE 155.

TARITARI.

1. Sea face of the land rim between the villages of Kuma and Keuea.
2. The village of Keuea seen from the lagoon flat, showing the vegetation of the western face of the land rim.
3. Wide Millepore lagoon flat off Keuea village, looking in a northwesterly direction.

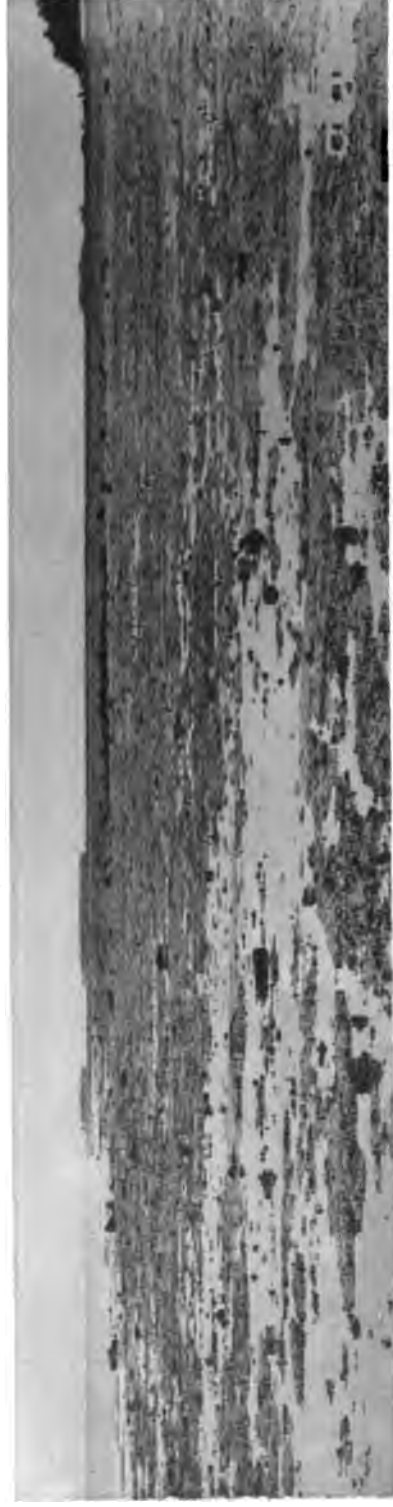
1-3, A. G. M., Phot.



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PLATE 156.

PLATE 156.

TARITARI.

1. On the point south of Keuea village, near the sea face, looking across the gap towards Butaritari.
2. On the lagoon beach south of Keuea village, looking across the lagoon opening of Keuea gap towards Tanimaiaki village.

1, 2, A. G. M., Phot.

“Albatross” Tropical Pacific Expedition.

Coral Reefs, PLATE 156.



1



HELIOTYPE CO., BOSTON.

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PLATE 157.

PLATE 157.

TARITARI.

1. Eastern edge of the lagoon flat on the north side of Keuea gap.
2. Shingle and sand islet on the sea face of a bay east of Keuea village.

1, 2, A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 157.



1



2

HELIOTYPE CO., BOSTON.

PLATE 158.

PLATE 158.

TARITARI.

1. Secondary reef flat platform lagoon formed on the sea face of Keuea gap between the flats extending across the gap and the sea wall, coral boulder and beach rock slabs dam extending from the northern side of the gap to the eastern horn of the atoll, east of Tanimaiaki village.
2. Sea wall (see Fig. 1), separating the secondary reef flat platform lagoon and the sea face of the gap, seen looking south, the lagoon face on the right, the sea face on the left.

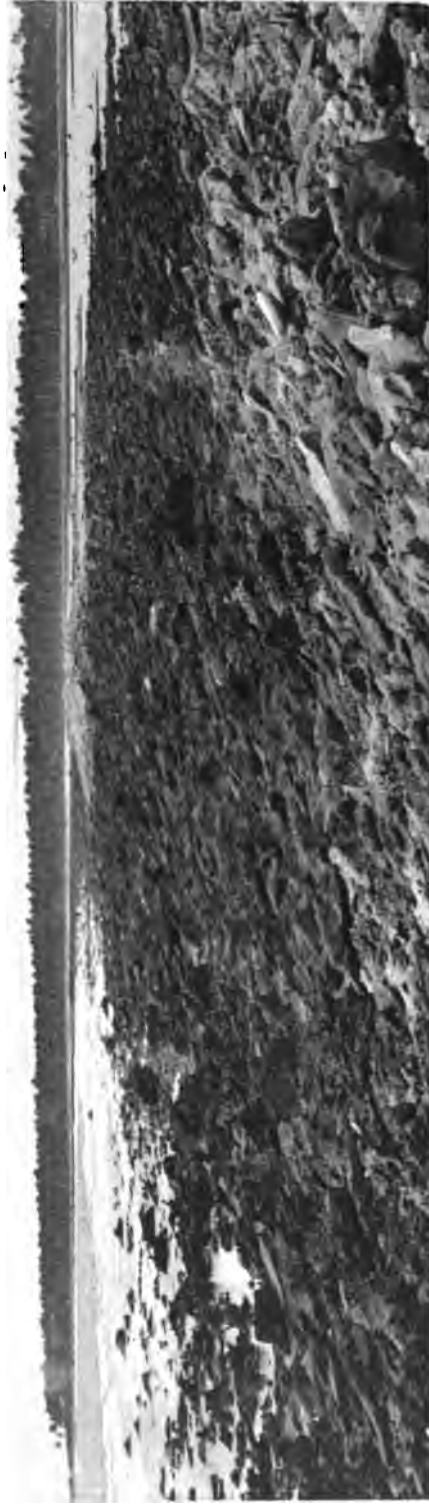
1, 2, A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 158.



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HELIOTYPE CO., BOSTON.

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PLATE 159.

PLATE 159.

TARITARI.

1. Lagoon beach and flat to the west of Butaritari.
2. Flats on the marshy land west of Butaritari, with bars covered by cocoanut trees and scrub vegetation, on the way from Butaritari to Ukiaññañ village, looking north.

1, 2, A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 159.



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HELIOTYPE CO., BOSTON.

PLATE 160.

PLATE 160.

TARITARI.

1. Bar covered with cocoanut trees, in partly submerged flat, on the western land rim of Butaritari Island on the way to Ukiaññañ.
2. Sink to the west of Butaritari, on the way to Ukiaññañ.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 160.



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HELIOTYPE CO., BOSTON.

PLATE 160 a.

PLATE 160 a.

1. Principal canoe passage, Tapriva (Ocean Island), Baanapa; elevated coralliferous limestone buttresses.
2. Lagoon, flanked by pitted and honeycombed pinnacles of elevated coralliferous limestone, at northeast end of (Pleasant Island) Nauru.
3. Buttresses of elevated coralliferous limestone, Tapriva (Ocean Island), Baanapa.
1-3 from Photographs by Mr. John Arundel.



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PLATE 160 b.

PLATE 160 b.

(PLEASANT ISLAND) NAURU.

1. Lagoon, flanked with pitted and honeycombed pinnacles of elevated coralliferous limestone, near the northeast extremity of the island.
2. Sink and surrounding vegetation near Ohlson's station.
1, 2 from Photographs by Mr. John Arundel.



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PLATE 161.

PLATE 161.

JALUIT.

1. Looking across from our anchorage, over the narrow land rim to the south of Jabor.
2. Southeastern passage into the atoll, seen from the sea face.
3. Islands and islets on the land rim to the north of the southeast pass, looking north.
4. Islands on the north side of the southeast pass, looking north across the lagoon side of the pass.

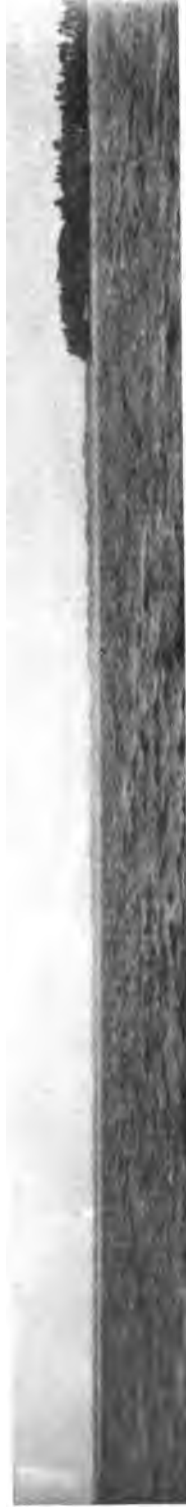
1-4, W. McM. W., Phot.



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PLATE 162.

PLATE 162.

JALUIT.

1. Beach rock bars on the lagoon face of the atoll, about two miles south of Jabor.
2. Looking across the northeast pass, along the west coast of Imrodj.
3. Beach rock bars and islets on the lagoon face of the atoll, south of the village of Jabor.
4. Beach rock flats and bars on the lagoon face south of Jabor.

1, 2, W. McM. W.; 3, 4, A. G. M., Phot.



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4

PLATE 163.

PLATE 163.

JALUIT.

1. Looking into the southwest pass, between Ai and Medjerrurik, seen from the sea.
2. Looking out of the southwest pass from the lagoon side.
3. Gap between Medjerrurik and Menga, seen off the southwest face of the atoll.
4. Flats in the lagoon near the southwest pass of the atoll.

1, 2, 4, W. McM. W.; 3, A. G. M., Phot.



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HELIOTYPE CO., BOSTON.

PLATE 164.

PLATE 164.

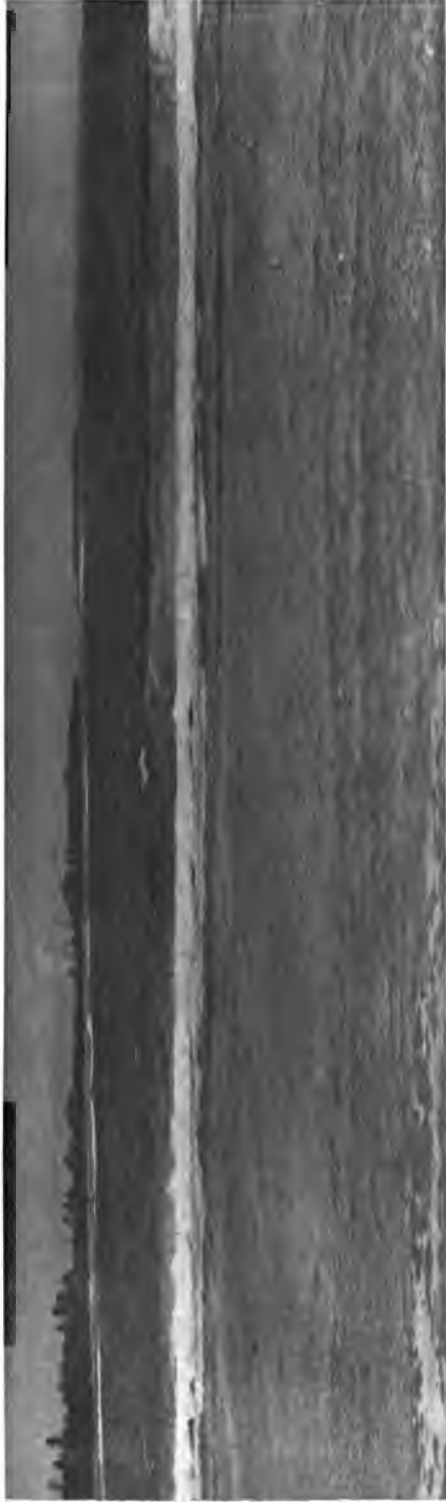
JALUIT.

1. Looking across the southeast pass, from the sea face of the beach, east of Jabor, the reef flat covered by the tide, but still showing the outer edge of Nullipore knolls.
2. Reef flat and beach rock bars, on the outer edge of the reef flat platform east of the village of Jabor.

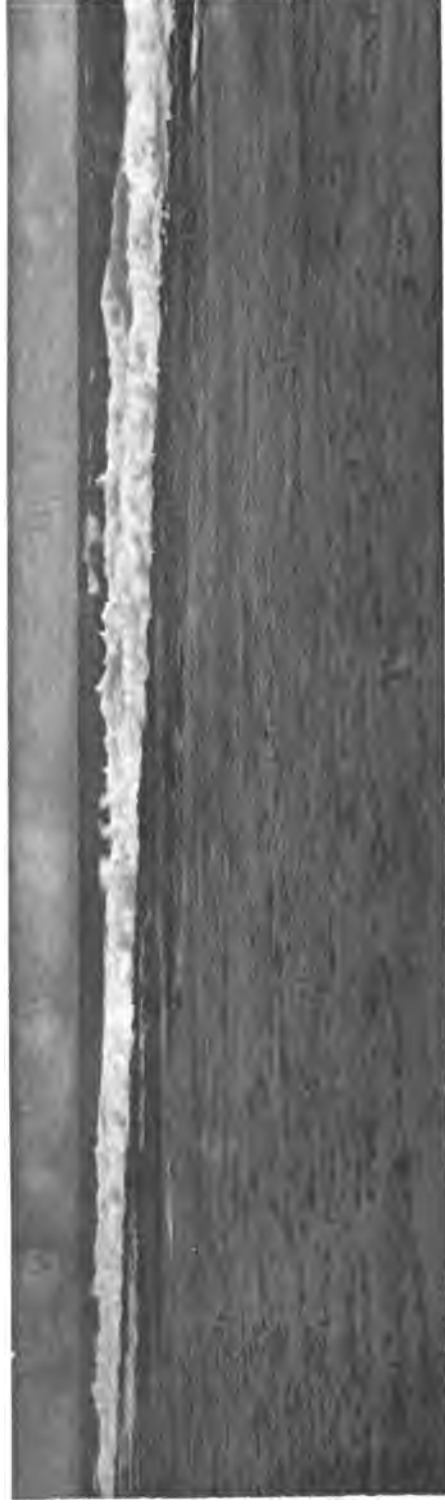
1, 2, A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 164.



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HELIOTYPE CO., BOSTON.

PLATE 165.

PLATE 165.

JALUIT.

1. Sea face of land rim east of Jabor, showing high coarse shingle beach, conglomerate and breccia outliers and reef flat platform, looking south.
2. Pot-holes on the reef flat platform, of the same part of the land rim as Fig. 1, seen looking north.

1, 2, A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 165.



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HELIOTYPE CO., BOSTON.

PLATE 166.

PLATE 166.

JALUIT.

1. Sink in the central part of the land rim of Enūbor Island. Mrs. Brandeis' Phot.
2. Sink to the east of the village of Jabor. A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.



Coral Reefs, PLATE 166.



HEINZ & CO., LONDON

PLATE 167.

PLATE 167.

1. Southwest point of Nauru, seen from the south.
2. Sea face of Jaluit, south of the southeast pass, at high tide. Hütter, Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 167.



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HELIOTYPE CO., BOSTON.

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PLATE 168.

PLATE 168.

AILINGLAP.

1. South pass, between Bigatjelang Island on the north and Enüebing Island on the south, seen from the sea.
2. Looking northwest along the sea face of the western shore of Bigatjelang Island.
3. Sand and shingle beach along the northern extremity of Bigatjelang Island, seen from the sea.
4. Airek Island, south face of the land rim of the atoll.

1, 2, 4, W. McM. W.; 3, A. G. M., Phot.



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PLATE 169.

PLATE 169.

KWAJALONG.

1. Gehh Island with reef flat to the south, as seen from the west.
 2. South face of the atoll, looking northwest from the extremity of Enntilabegan Island.
 3. North end of Jileginni Island, with sand bars from the lagoon or east side of the land rim, blown from the west face over the reef flat platform; a line of breakers indicates a shoal in the lagoon.
 4. Island, sand bar, and wide gap on the west face of Kwajalong north of Jileginni.
- 1, 2, 4, W. McM. W.; 3, A. G. M. Phot.



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HELIOTYPE CO., BOSTON.

PLATE 170.

PLATE 170.

KWAJALONG.

1. Island north of Jerr Pass on the west face of the atoll.
2. Southern extremity of Jerr Island with submerged reef flat to the southwest face of the atoll.
3. Wotje Pass, Wotje Island to the south, Ennümet Island to the north, seen from the sea.
4. Submerged reef south of Eru Island, west face of Kwajalong.

1-3, A. G. M.; 4, W. McM. W., Phot.



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PLATE 171.

PLATE 171.

1. Coming up to the northwest horn of Ailinglap from the south, showing the wide reef flat and reef flat platform lagoon; Wotja Island in the distance.
2. Reef flat platform, south shore of Rongelappelab Island, looking west, Rongelab.
3. Lagoon shore of Rongelappelab Island, looking west, showing beach rock at base of coarse coral sand beach, Rongelab.

1, 2, W. McM. W.; 3, A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 171.



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HELIOTYPE CO., BOSTON.



PLATE 172.

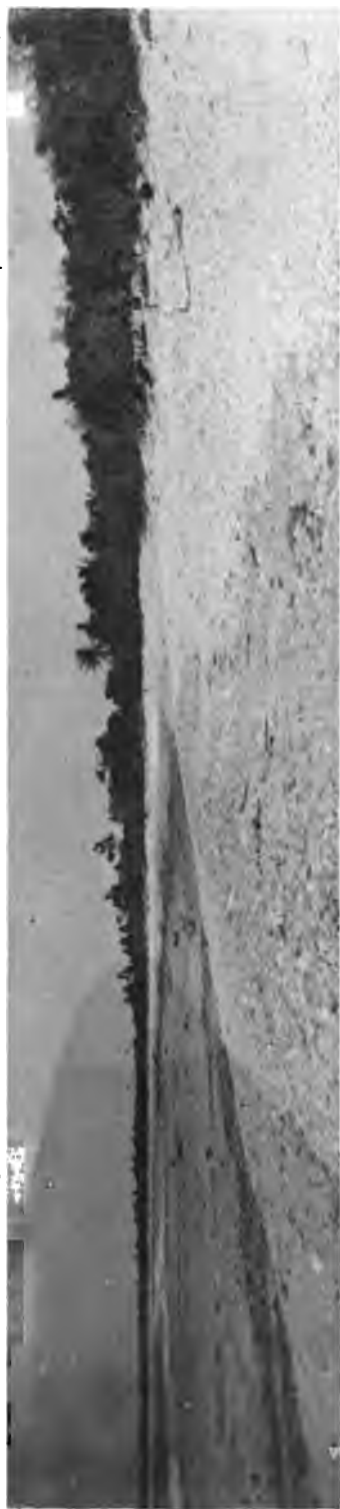
PLATE 172.

RONGELAB.

1. Sand beach with beach rock and wide reef flat platform on the south shore of Rongelappelab Island, looking west. W. McM. W., Phot.
2. Sand beach with beach rock on lagoon face of Rongelappelab Island, looking west, with belt of characteristic Marshall Island vegetation on the summit of the beach.

A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.



Coral Reefs, PLATE 172.

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HELIOTYPE CO., BOSTON.

PLATE 173.

PLATE 173.

Vegetation in the central part of Rongelappelab Island, Rongelab, Pandanus, Scævola.

W. McM. W., Phot.



PLATE 174.

PLATE 174.

LIKIEB.

1. West face of Kapenor Island, west face of the atoll.
2. Northern point of island at the southwest horn of the atoll.
3. Looking into the lagoon through gap between islands to the west of the South Pass, seen from the south.
4. Islet and sand bar to the east of the South Pass, seen from the lagoon side.

1-4, W. McM. W., Phot.



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PLATE 175.

PLATE 175.

LIKIEB.

1. Coral sand and shingle beach flanked with beach rock, on the sea face of the atoll looking north.
2. Beach rock shore on the lagoon face of the atoll, looking east.

1, 2, A. G. M., Phot.



1



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HELIO TYPE CO., BOSTON.

PLATE 176.

PLATE 176.

Small coral heads and boulders among the bushes and in the vegetation to the rear of the beach on the sea face of Likiep. A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 176.



HELIOTYPE CO., BOSTON.

PLATE 177.

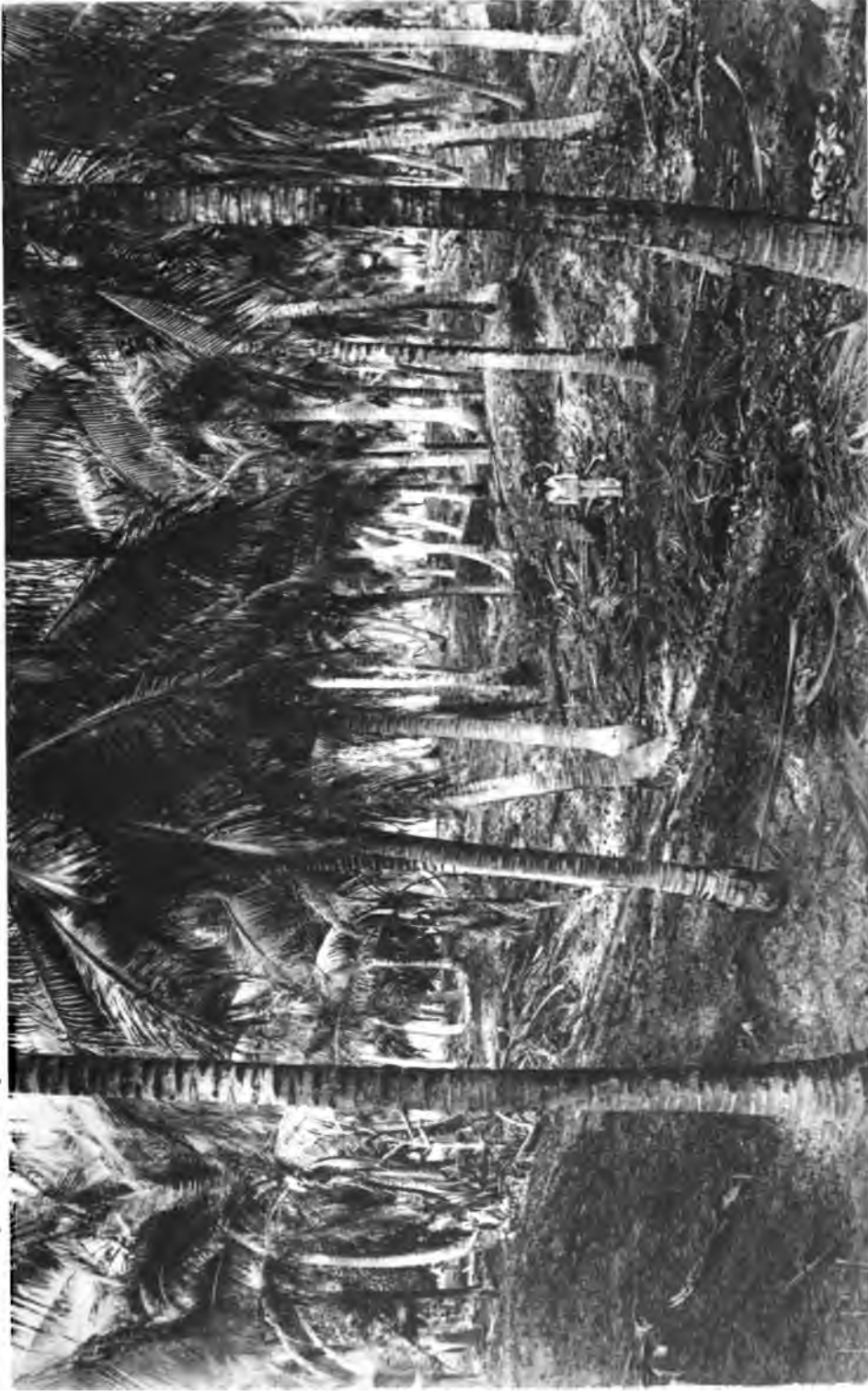
PLATE 177.

Dry sinks formed by the connection of lagoon islets, Likiep. A. G. M., Phot.



Coral Reefs, PLATE 177.

"Albatross" Tropical Pacific Expedition.



HELIOTYPE CO., BOSTON.

PLATE 178.

PLATE 178.

Vegetation in the central part of Wotje Island, Wotje, Pandanus, Scævola.

A. G. M., Phot.



PLATE 178.

PLATE 179.

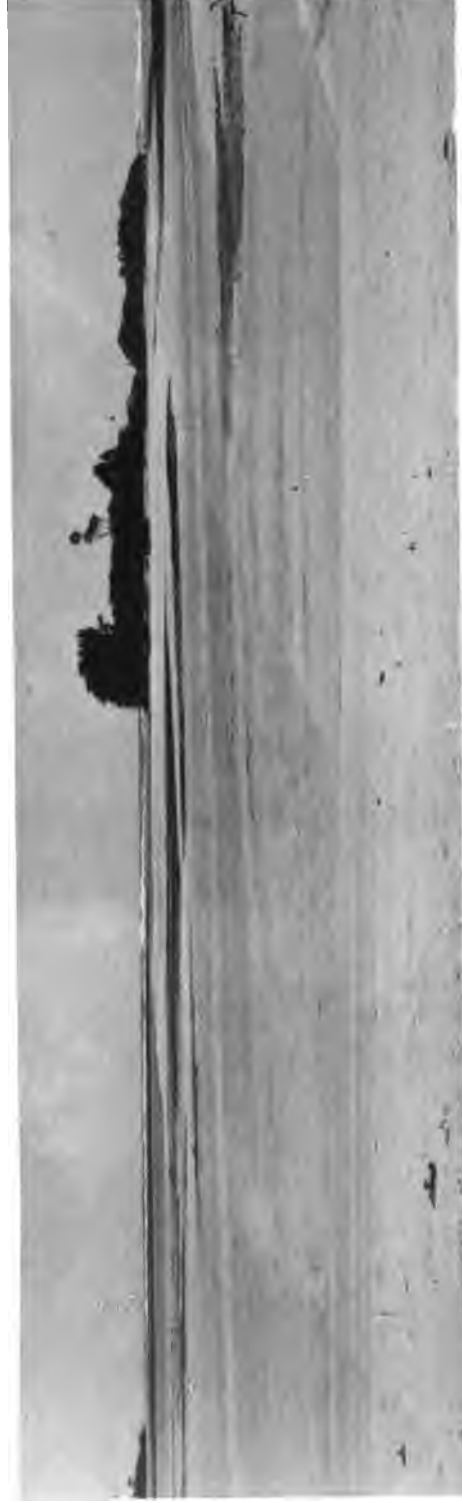
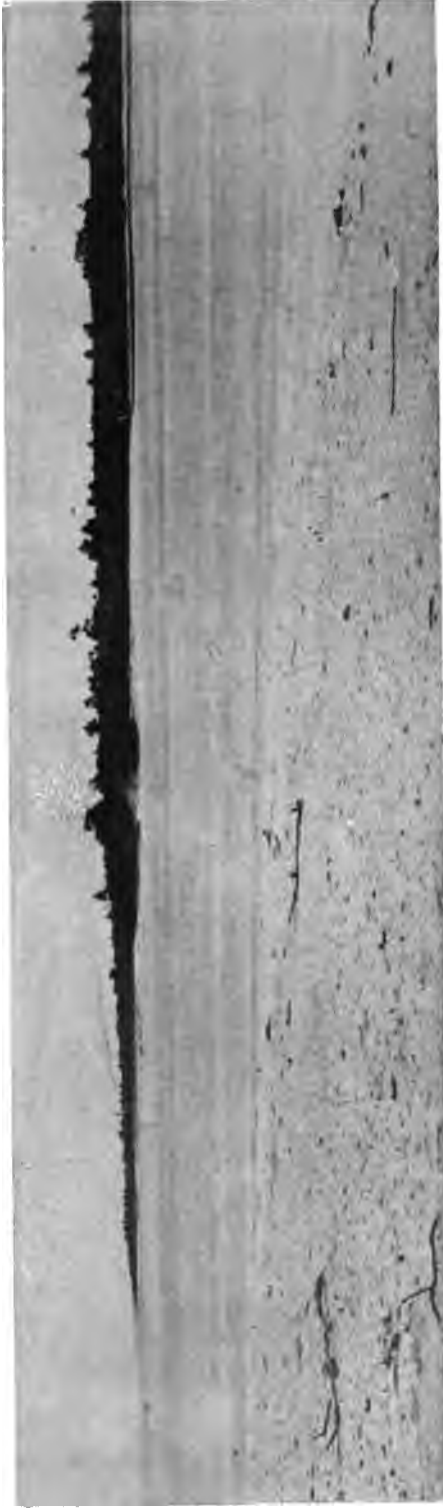
WOTJE.

1. Looking across the wide gap to the north of Wotje Island, at high tide.
2. Wide gap and lagoon flat, with islet and shingle bars to the north of Wotje Island.

1, 2, A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 179.



HELIOTYPE CO., BOSTON.

PLATE 180.

PLATE 180.

WOTJE.

1. Wide gap between the northern extremity of Wotje Island and the island to the north.
2. Islands and islets to the west of Schischmarev Pass, seen from the sea.

ARHINO.

3. Islands at the base of the northern horn of the 'atoll, looking west, seen from the sea.
4. Looking across the gap between islands to the west of Dodo Pass, to the islands on the northwest face of the atoll.

1-4, W. McM. W., Phot.



PLATE 181.

PLATE 181.

ARHNO.

1. Islet west of Dodo Pass, looking across the lagoon, South Point Island in the distance.
2. Distant view of the eastern land rim of the atoll (Terranova), seen from the lagoon side of Dodo Pass.
3. Looking northeast into the extension of the lagoon into the eastern spit of the atoll, across the western angle of Terranova, showing the line of islands on the north face of the eastern extension of the lagoon, seen from our anchorage.
4. Islands on the north face of the lagoon extension into the eastern spit, seen from our anchorage in the lagoon, off Terranova.

1, 2, 4, W. McM. W.; 3, A. G. M., Phot.





PLATE 180.

PLATE 182.

ARHNO.

1. West face of the northwest point seen from the west, the islands of the east face of the horn in the background.
2. West face of the horn, looking across the west flats to the single row of islands nearer the east face of the atoll.
3. Ledge on the eastern side of the entrance to Port Lottin, Kusaie.
4. Islands on a part of the south face of the atoll of Andema, seen from the southeast; Kahalape Island to the right, Paguaiganigue to the left.

1, 2, 4, W. McM. W.; 3, A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

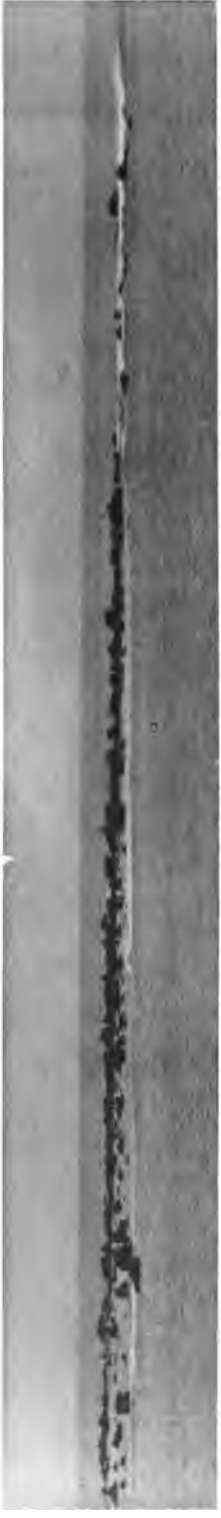
Coral Reefs, PLATE 182.



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HELOTYPE CO., BOSTON.

PLATE 183.

PLATE 183.

1. South point of Pachiai Island, Andema, seen from the south.

PINGELAP.

2. Southern part of the west face of Pingelap Island.
3. Looking into the lagoon of the atoll from the west across to the gap between Pingelap Island (to the right) and Tugulu Island (to the left) on the northeast face of the atoll.
4. Village on the west face of Pingelap Island.

1-4, A. G. M., Phot.



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HELIOTYPE CO., BOSTON.

PLATE 184.

PLATE 184.

KUSAIE.

1. Vegetation on the lagoon side of the barrier reef near Point Lesson to the west of Port Lottin.
2. Vegetation on the east shore of the barrier reef on the west side of Port Lottin at the northern extremity of the harbor.
3. Looking northeast from Cape Vauvilliers along the northwest face of Kusaie, Gabert Island in the distance.

1, 2, A. G. M.; 3, W. McM. W., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 184.



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HELIOTYPE CO., BOSTON.

3

PLATE 185.

PLATE 185.

KUSAIE.

1. Fringe of mangroves along the south face of the island to the east of Port Lottin.
2. Fringe of mangroves along the south face of the island, looking north from our anchorage.
3. Looking west from the entrance to the lagoon channel running south along the base of the island, east of Port Lottin.

1-3, A. G. M., Phot.



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HELIOGRAPH CO., BOSTON.

PLATE 186.

PLATE 186.

KUSAIE.

Vegetation along the sides of the lagoon channel of the south face of the island, looking east. A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 186.



HELIOTYPE CO., BOSTON.

PLATE 187.

PLATE 187.

KUSAIE.

Boulder of recent reef rock on the reef flat east of Lottin Harbor (about eighteen feet by twelve feet). A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 187.



HELIOTYPE CO., BOSTON.

PLATE 188.

PLATE 188.

PONAPI.

1. Looking north across the mouth of Port Métalanim, Nar Island on the right.
2. Looking into Port Métalanim, across the reef connecting Nar and Narcap Islands.
3. Barrier reef to the south of Métalanim, Nahanur Island in the centre.
4. Barrier reef and flat around Nahanapenlord Island.

1, 2, W. McM. W.; 3, 4, A. G. M., Phot.



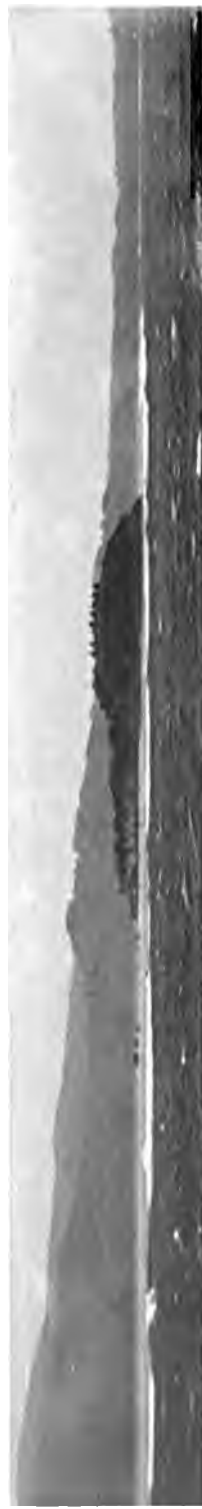
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PLATE 189.

PLATE 189.

PONAPI.

1. Panian Islands, seen from the east.
2. Nahatik islets, on the barrier reef to the east of Kiti Harbor, seen from the south, looking over the wide reef flat separating them from the mangrove fringe which extends along the south face of Ponapi.
3. Mangrove islet at the east horn of the entrance to Kiti Harbor, looking east towards Point Nantiaiti, the Panian Islands in the distance.
4. Looking northeast, over the wide reef flat towards Point Nantiaiti, inside the barrier reef, showing the black belt of mangroves fringing the south face of the island; Lucoila Peak on the left.

1-4, A. G. M., Phot.



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PLATE 190.

PLATE 190.

PONAPI.

1. Looking east from our anchorage in Kiti Harbor towards Point Nantiaiti, Peak Roie on the left, the Panian Islands in the centre, the eastern horn of Kiti Harbor on the right.
2. Looking northwest from our anchorage in Kiti Harbor, along the west face of Ponapi through the gap between Tulatik Island and the southwest point of the island.
3. East face of Narlap Island from our anchorage in Kiti Harbor.
4. Looking over the extremity of the south island and the south horn of Royalist atoll across to Lauvergne Island.

1, 3, W. McM. W.; 2, 4, A. G. M., Phot.

THE REEF EDGE AS SEEN FROM THE SHIP.



HELIOTYPE CO., BOSTON.



PLATE 191.

PLATE 191.

TRUK.

1. Looking north past Faleu Island, on the southern barrier reef into the lagoon of Truk ; the island of Peridiak in the distance.
2. Islands on the barrier reef of the south face of the atoll, Mesegou to the right, Uijec in the centre, next Udidan, and on the left of Uligar Pass, Fanan Island.
3. The eastern group of islands in the lagoon of Truk ; the island of Umol to the right, Ruk in the centre, and Tsis to the left.
4. Uola seen across the northwest point of Ruk, from the south.

1, 3, W. McM. W.; 2, 4, A. G. M., Phot.



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PLATE 192.

PLATE 192.

TRUK.

1. Mangrove islets along the southwest face of Uola, near our anchorage.
2. Part of the west face of Uola, seen from our anchorage.

1, 2, A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 192.



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HELIOTYPE CO., BOSTON.

PLATE 193.

PLATE 193.

TRUK.

1. Looking south from our anchorage, Ruk on the right, Umol in the centre, Toloas on the left.
2. Looking from our anchorage towards the western group of islands in the atoll, Udot to the left, with the peaks of Tol towards the right.
3. Looking across the north end of Uola, towards Gregoire Island (on the left).
4. North end of Pis Island, seen going out of the pass, looking across the horn of the barrier reef towards the island to the east of Pis.

1, 3, 4, W. McM. W.; 2, A. G. M., Phot.



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PLATE 194.

PLATE 194.

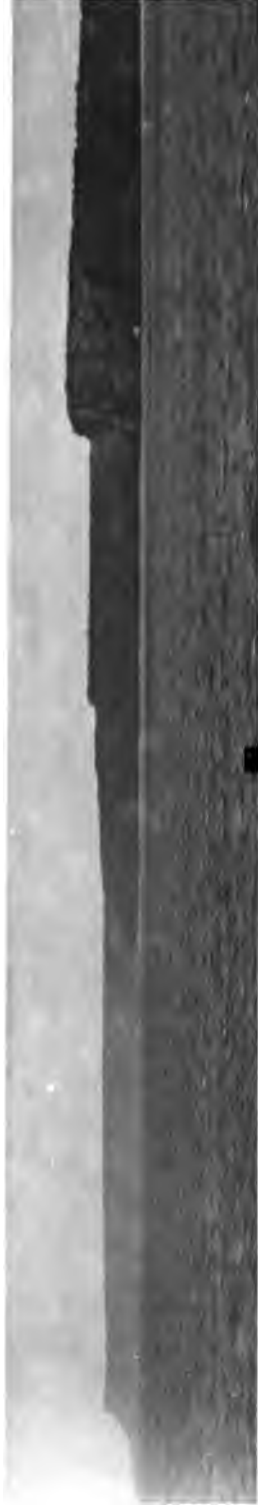
GUAM.

1. Patay Point, east face of the island from the southeast.
2. Looking north from Punta de los Amantes, towards Point Ritidian, west face of the island.
3. Junction of the volcanic outburst with the elevated coralliferous limestone belt, west face of the island, near Agaña.

1, W. McM. W.; 2, 3, A. G. M., Phot.



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PLATE 195.

PLATE 195.

GUAM.

1. Looking over Luminan barrier reef, on the north face of the harbor of San Luis d'Apra, Cabras Island on the right. Point Ritidian in the distance.
2. Looking south from our anchorage in the harbor of San Luis d'Apra, over Oroté Peninsula, towards the southern volcanic range of Guam.
3. Elevated coralliferous limestone bluffs at the western extremity of Oroté Point, the volcanic bluffs of Point Facpi in the distance.

1, 2, W. McM. W.; 3, A. G. M., Phot.



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PLATE 196.

PLATE 196.

GUAM.

**Eroded elevated coralliferous limestone on the southern face of Cabras Island, with a clump
of Cycads. A. G. M., Phot.**

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 196.



HELOTYPE CO., BOSTON.

PLATE 197.

PLATE 197.

GUAM.

1. Looking over the eastern extension of Oroté Peninsula towards the southern volcanic hills of Guam.
- 2 Volcanic hills to the east of Agaña.

1, 2, A. G. M., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 197.



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HELIOTYPE CO., BOSTON.

PLATE 198.

PLATE 198

GUAM.

1. Volcanic bluff at Point Facpi; the islet to the right is an outlier of elevated coralliferous limestone, southwest face of Guam.
2. Looking south from Point Facpi, southwest coast of Guam; in the distance sharp volcanic hills, rounded ridge of elevated coralliferous limestone, with blocks and outliers of the same on the shore.
3. Looking over the mesa of Guam towards Mount Santa Rosa from the hill above Agaña.

1-3, A. G. M., Phot.



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PLATE 199.

PLATE 199.

ROTA.

1. The west face of the island and its terraces, seen from off Point Taipingon.
 2. Showing the terraces of the southwest face of the island, looking across Sosanlagh Bay.
- 1, 2, W. McM. W., Phot.

"Albatross" Tropical Pacific Expedition.

Coral Reefs, PLATE 199.



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HELIOTYPE CO., BOSTON.

MEMOIRS

Je Branner
Feb 24 '12

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AT

HARVARD COLLEGE.

VOL. XXVIII.

PLATES.

III.

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REPORTS ON THE SCIENTIFIC RESULTS OF THE EXPEDITION TO THE TROPICAL PACIFIC, in charge of ALEXANDER AGASSIZ, by the U. S. Fish Commission Steamer "Albatross," from August, 1899, to March, 1900, Commander JEFFERSON F. MOSER, U. S. N., Commanding. IV. THE CORAL REEFS OF THE TROPICAL PACIFIC. By ALEXANDER AGASSIZ. pp. xxxiii., 410. 238 Plates. February, 1903.

ONE VOLUME TEXT. THREE VOLUMES PLATES.

Memoirs of the Museum of Comparative Zoölogy

AT HARVARD COLLEGE.

VOL. XXVIII.

**REPORTS ON THE SCIENTIFIC RESULTS OF THE EXPEDITION TO THE
TROPICAL PACIFIC, IN CHARGE OF ALEXANDER AGASSIZ, BY THE
U. S. FISH COMMISSION STEAMER "ALBATROSS," FROM AUGUST,
1899, TO MARCH, 1900, COMMANDER JEFFERSON F. MOSER, U. S. N.,
COMMANDING.**

IV.

THE CORAL REEFS

OF THE

TROPICAL PACIFIC.

BY ALEXANDER AGASSIZ.

III. — PLATES 200 TO 236.

CHARTS AND TWO COLORED PLATES.

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CAMBRIDGE, U. S. A. :

Printed for the Museum.

FEBRUARY, 1903.



PLATE 200.

PLATE 200.

Track of the " Albatross " through the Marquesas, reduced from Admiralty Chart 1640.

"ALBATROSS" TROP

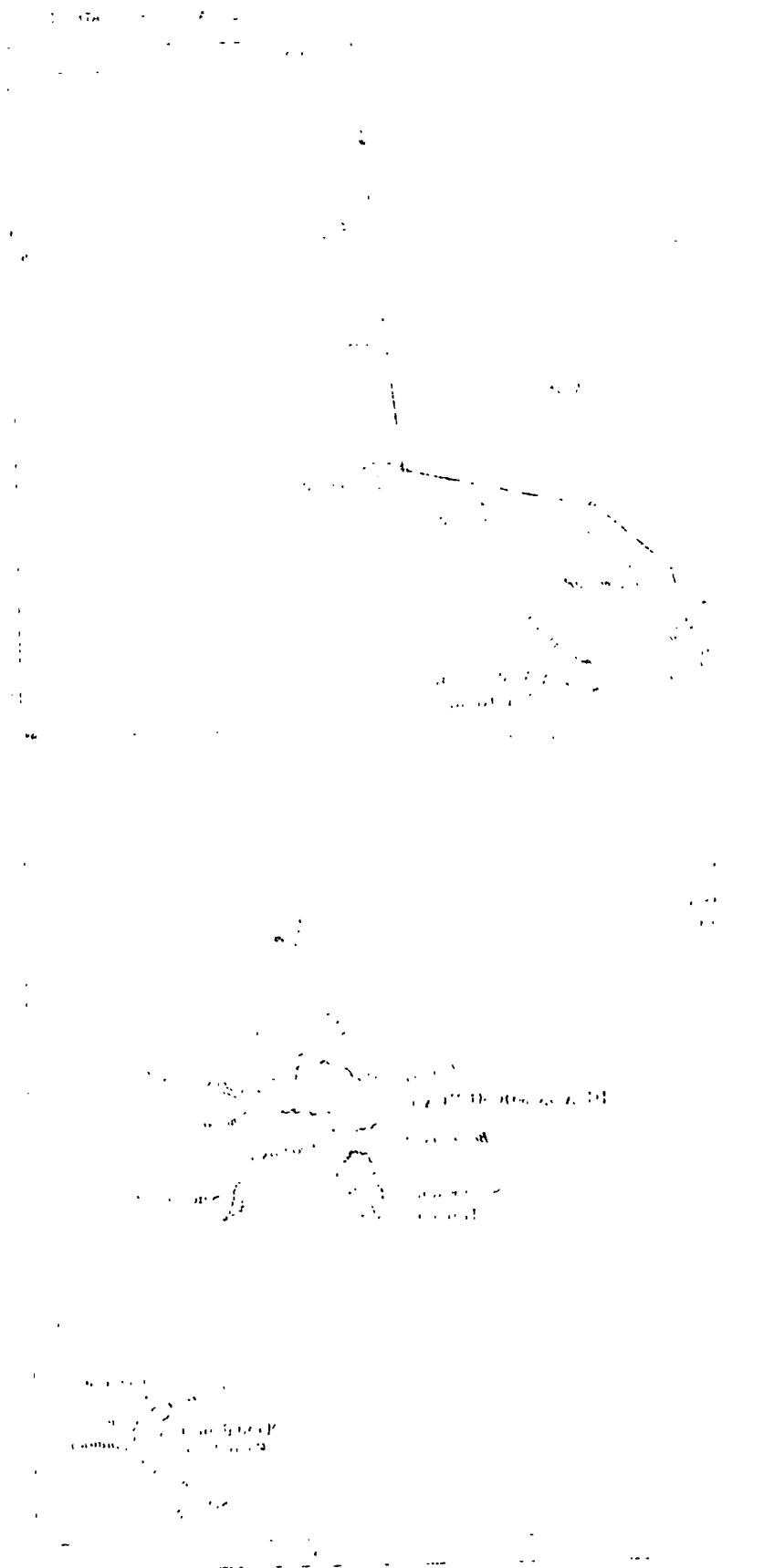
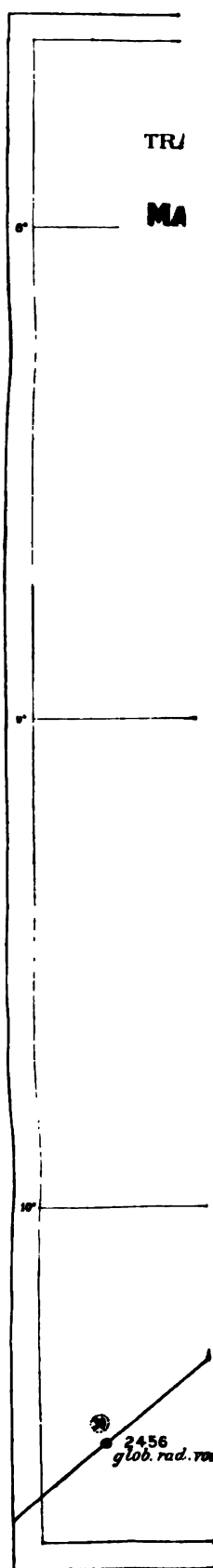
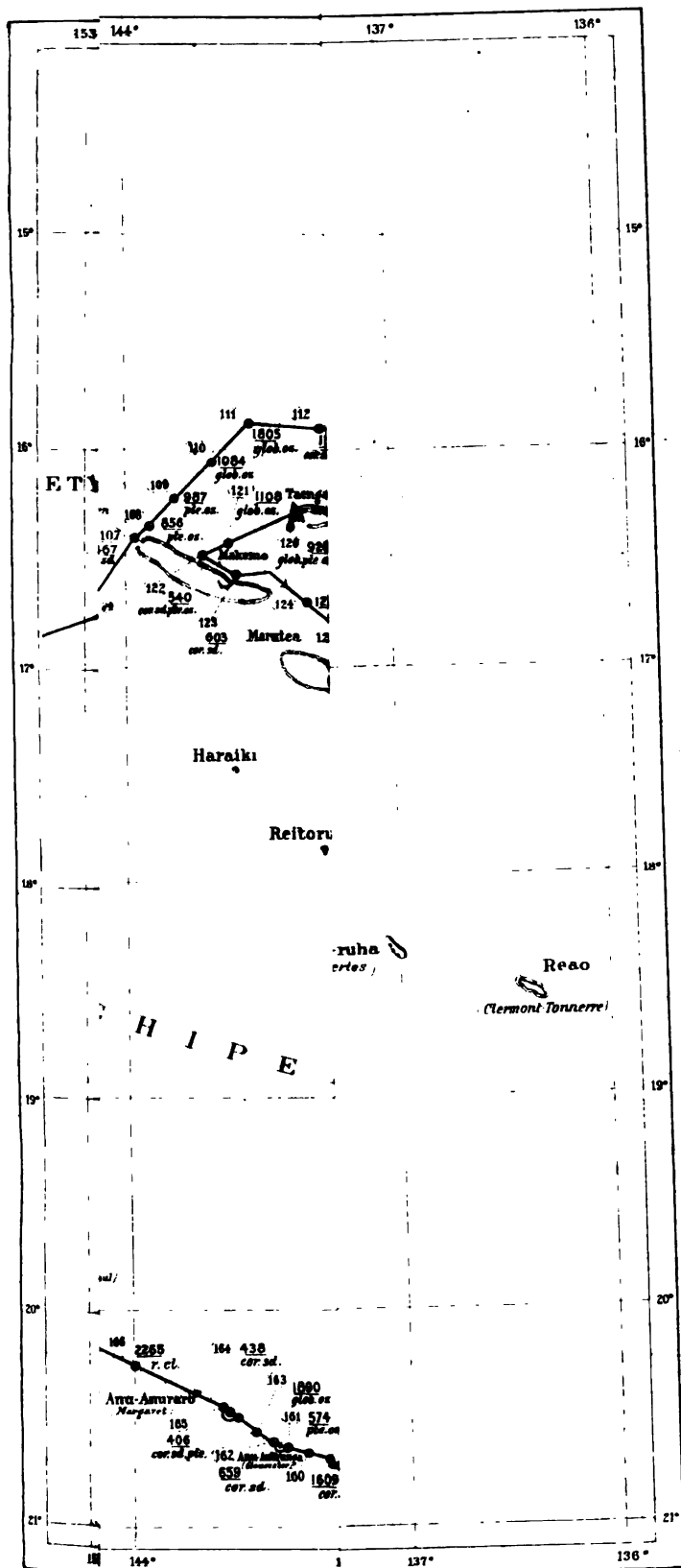


PLATE 201.

PLATE 201.

Track of the "Albatross" through the Paumotus and Society Islands.



Tra

PLATE 202.

PLATE 202.

The western Paumotus and the Society Islands, from A. Chart 767.

Coral Reef

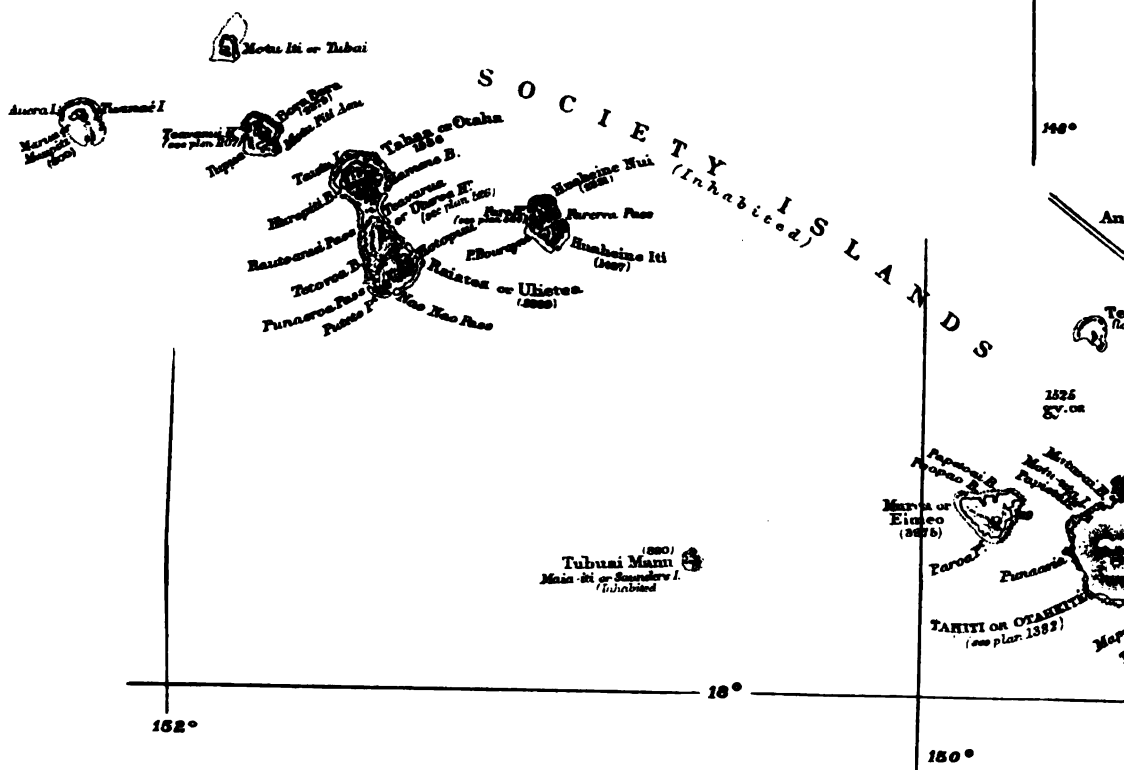
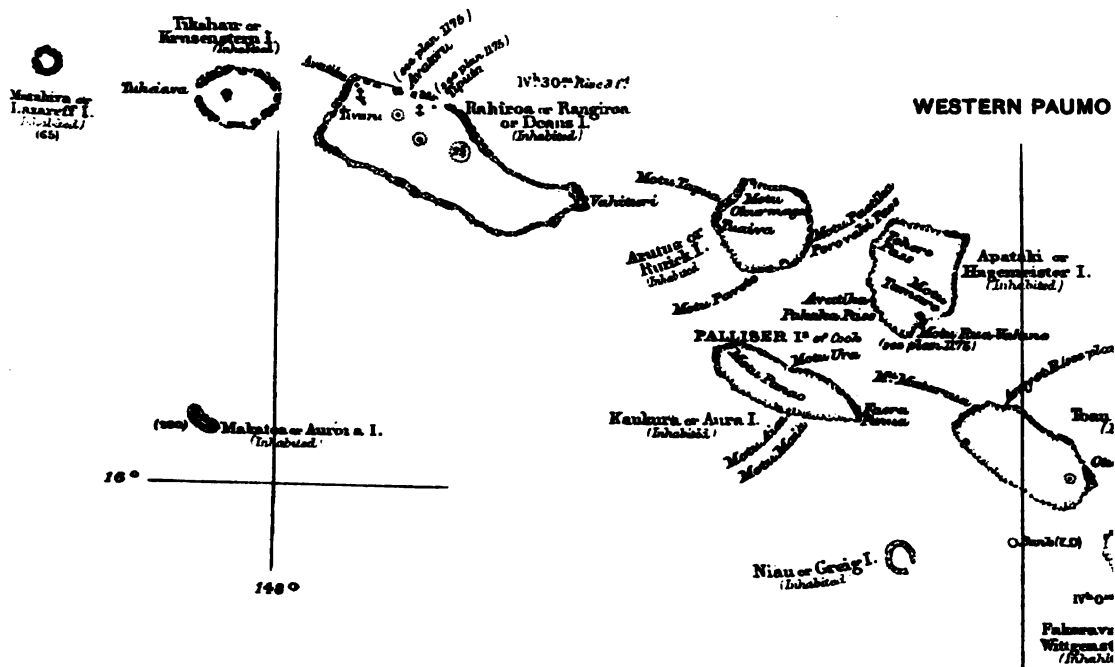
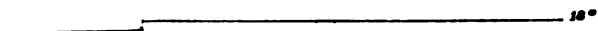


PLATE 203.

The eastern Paumotu as far as Pinaki, including the Duke of Gloucester Islands, from
A. Chart 767.



ASTERN PAUMOTUS



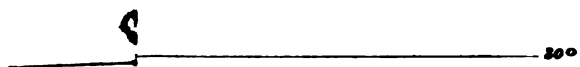
Albatross, or *Theraps*, *Cap*
(*Albatross*)

Albatross, or
Cap, *Theraps*, *I.*
(*Albatross*)

134 *Vairavato*
or *Vairavato*, *I.*
(*Albatross*)

Albatross, or
Cap, *Theraps*, *I.*
(*Albatross*)

Albatross, or
Cap, *Theraps*, *I.*
(*Albatross*)



Vairavato, *Theraps*
or *Theraps*, *I.*
(*Albatross*)

PLATE 204.

PLATE 204.

THE PAUMOTUS.

1. Fakarava, from A. Chart 767, and corrected by officers of the "Albatross," scale twelve miles to the inch.
2. Fakaina, from a sketch by Captain Garnier, scale three miles to the inch.
3. Tiputa Pass, Rangiroa, from H. O. Chart 75, scale three fourths of a mile to the inch.
4. Rangiroa, Tikahau, and Matahiva, from H. O. Chart 75, and corrections by officers of the "Albatross," scale twenty miles to the inch.
5. Strait between Marokau and Ravahere, from H. O. Chart 79, scale nine miles to the inch.
6. Northeast pass into Makemo, from surveys by officers of the "Albatross," scale one third of a mile to the inch.
7. Northwest face of Fakarava, from A. Chart 1175, scale two miles to the inch.

ALBATRO CORAL REEFS PLATE 204.

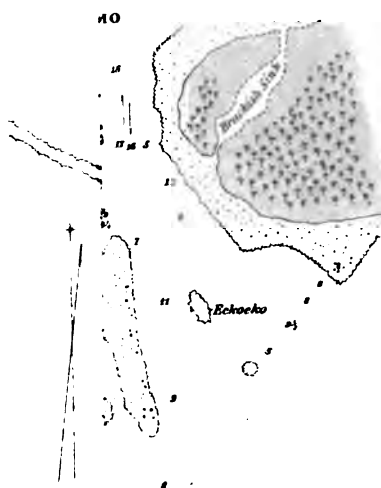
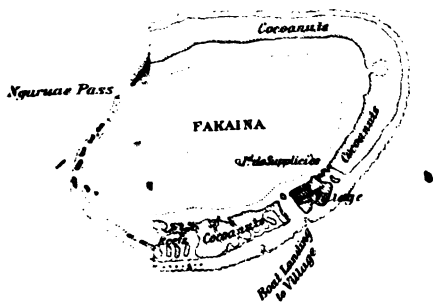


PLATE 205.

from H. O. Chart 83, scale two miles to the inch.

A. Chart 1111, scale six miles to the inch.

Pass, Rangiroa, from H. O. Chart 960, scale two miles to the inch.

from H. O. Chart 83, scale three miles to the inch.

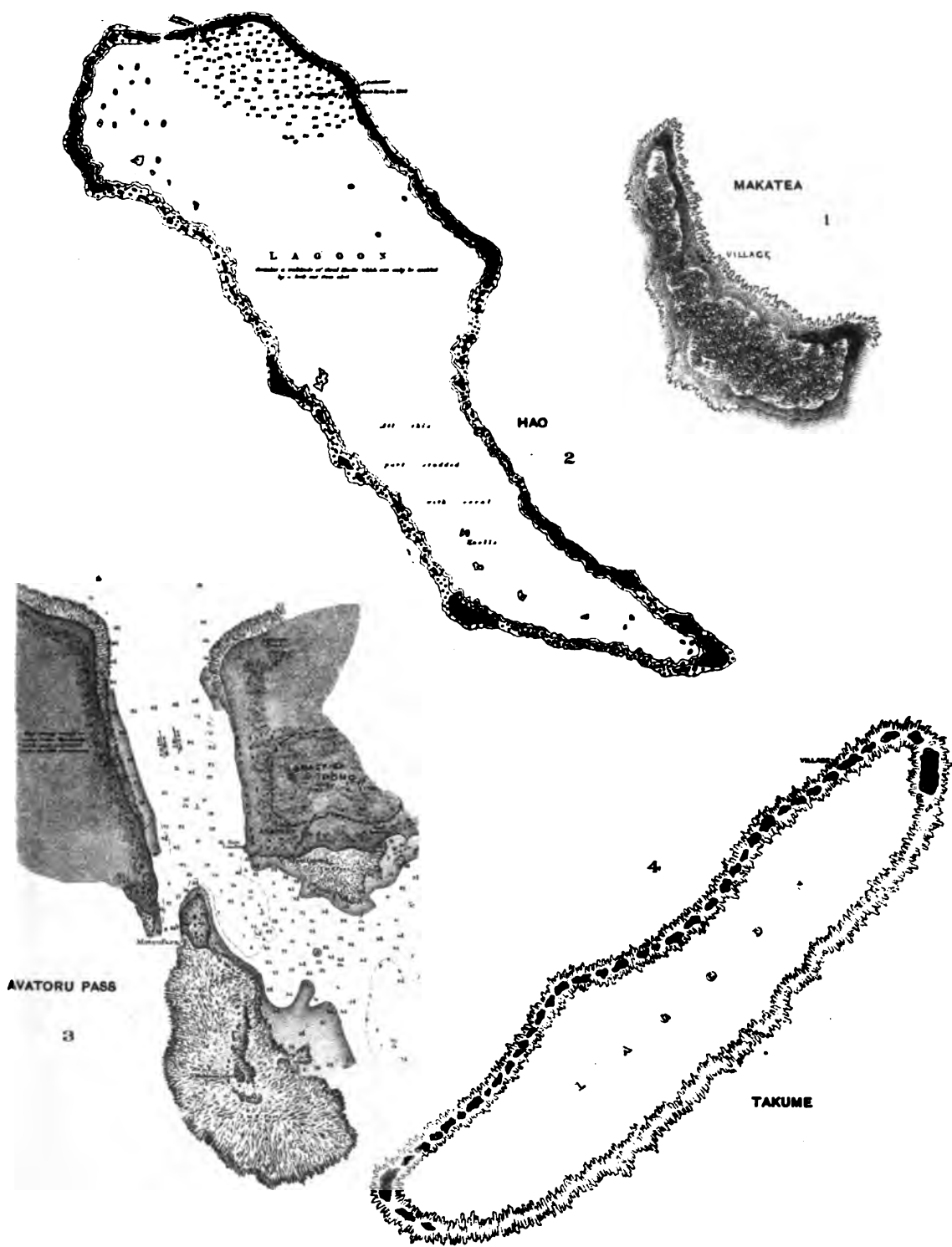


PLATE 206.

PLATE 206.

1. Anu-Anurunga, scale one mile to the inch.
2. Anu-Anuraro, scale one mile to the inch.
3. Pinaki, scale one mile to the inch.
4. Nukutipipi, scale one fourth of a mile to the inch.
1, 2, 4, from sketches by H. C. Fassett; 3, from a sketch by C. H. Townsend.

"ALBATROSS" CORAL REEFS PLATE 206

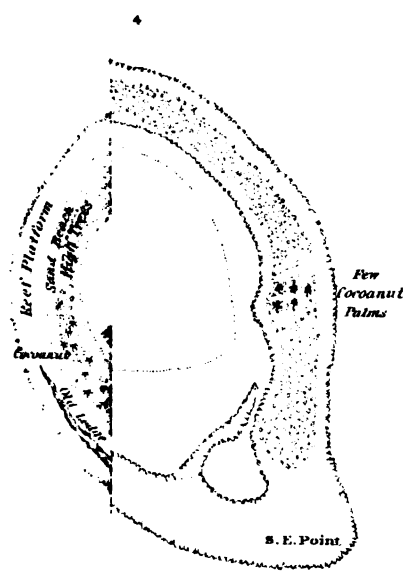
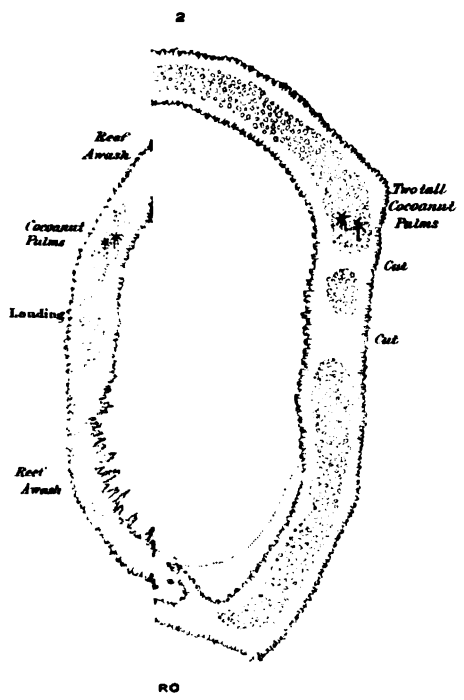


PLATE 207.

The Gambier Islands, from A. Chart 1112, scale two miles to the inch.

**MANGA REVA
OR
GAMBIER ISLANDS**

The map illustrates the Manga Reva or Gambier Islands, showing the main island, Manga-Reva (Pearl I.), and surrounding smaller islands such as Tara-Ya (Thalys I.) and Aea-Mari I. Key features include the West Passage, South West Passage, and South East Passage. A compass rose is located in the bottom left corner.

PLATE 208.

PLATE 208.

1. Tairapu Peninsula (Tahiti), with its surrounding fringing reefs.
2. Fringing reefs of the east side of Tahiti, from Taravao Bay to Artémise Bank.
3. The fringing and barrier reefs of the south shore of Tahiti, from Popote Bay to the Isthmus of Taravao.
4. The fringing and barrier reefs of the southwest part of Tahiti, from Paea to West Ava-iti.
5. The fringing and barrier reefs from Papieté Pass to north of Acna.
6. Murea, with its fringing and barrier reefs. All figures reduced from A. Chart 1382, scale three miles to the inch.

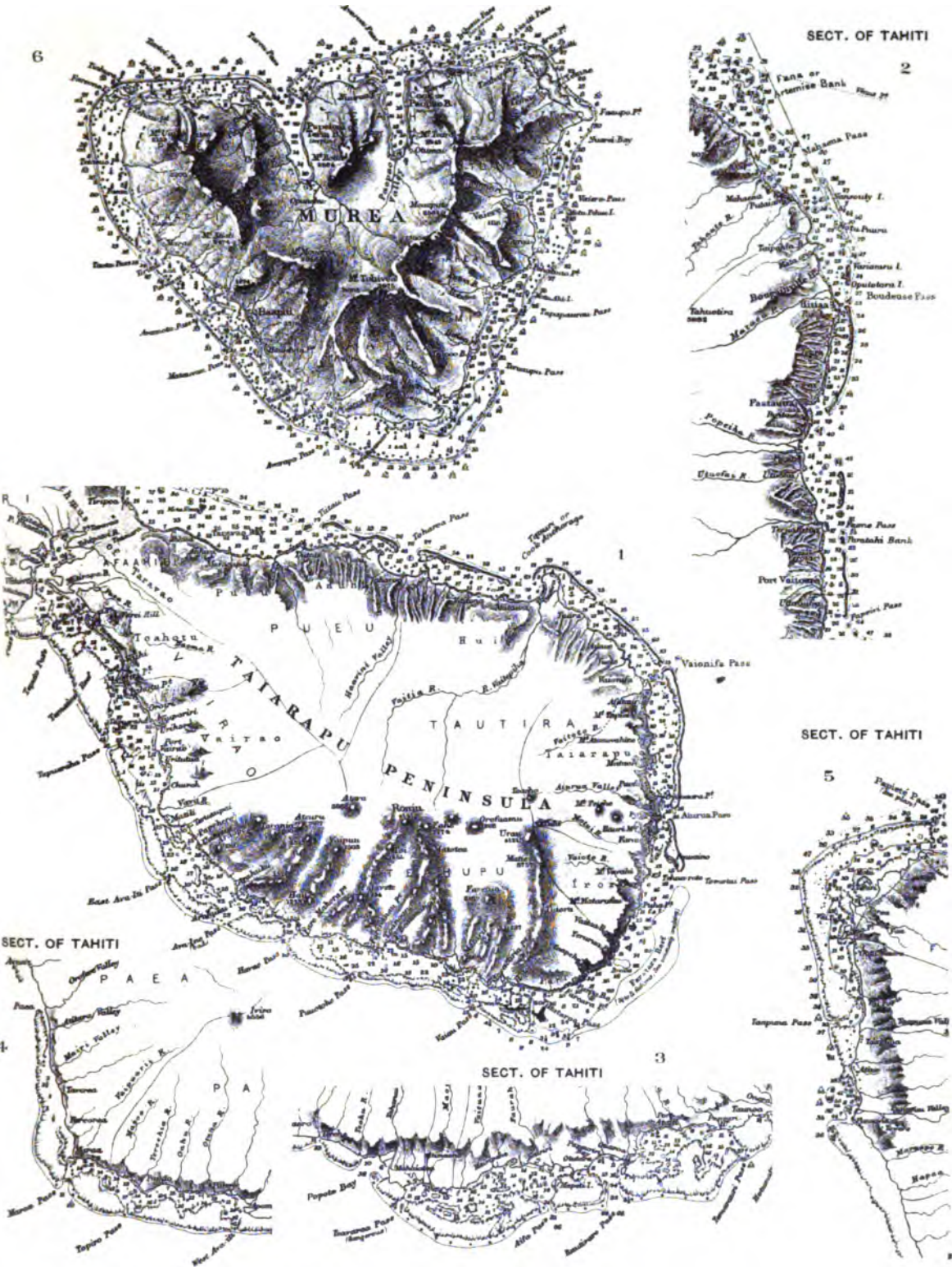
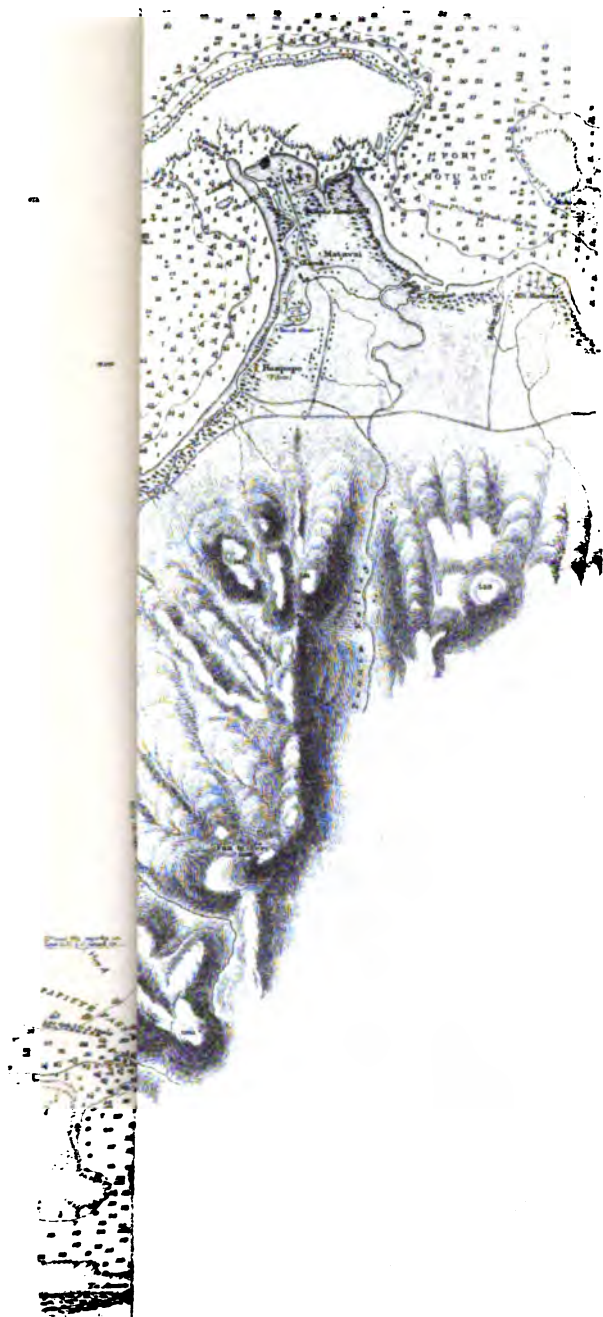


PLATE 209.

PLATE 209.

Northwest shore of Tahiti, from Point Venus to Papieté Pass, from A. Chart 1382, scale
two miles to the inch.



North

PLATE 210.

PLATE 210.

1. Huaheine, scale two miles to the inch.
 2. Raiatea and Tahaa, scale three miles to the inch.
 3. Bora Bora, scale two miles to the inch.
 4. Maupiti, scale three miles to the inch.
- 1-4 from A. Chart 1060.

Tutu

BORA BORA (see plan 1928)

3

HUAHEINE



1
2
3
4

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PLATE 211.

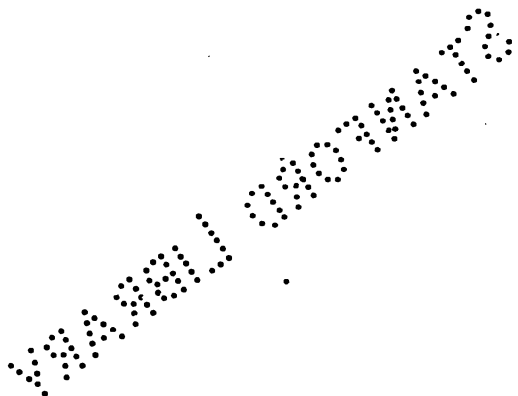


PLATE 211.

Track of "Albatross" from the Society Islands to Niue.

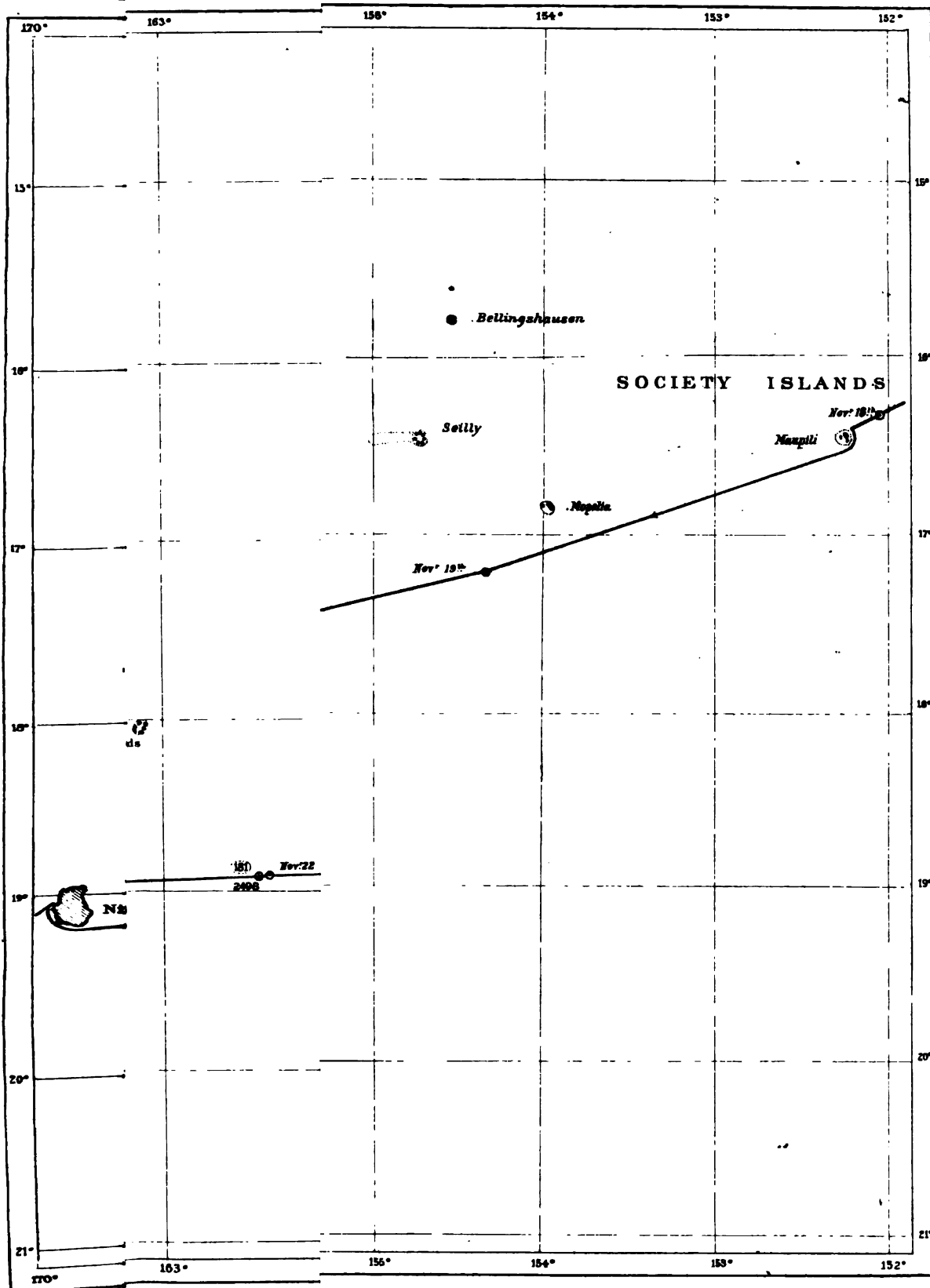




PLATE 213.

PLATE 213.

Track of the "Albatross," Niue to Fiji.

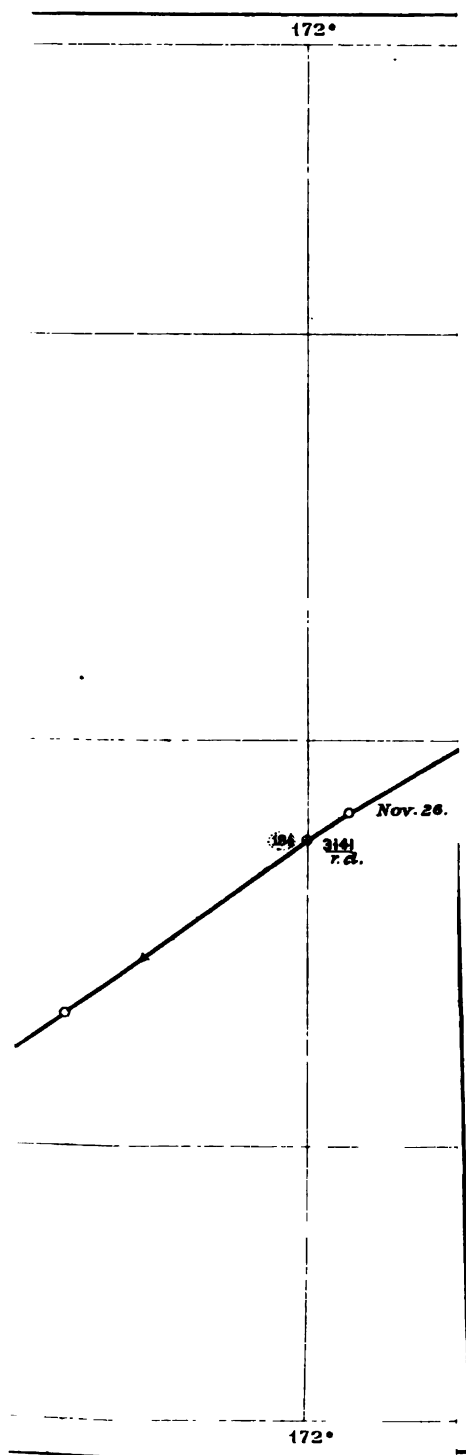
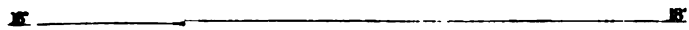


PLATE 214.

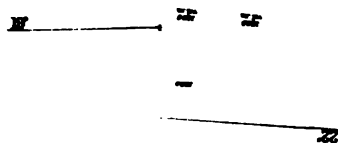
PLATE 214.

The Tonga Archipelago, from A. Chart 2421.



7

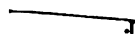
4



22

22
22
22
22
22

20



Th

PLATE 215.

PLATE 215.

Tongatábu, from A. Chart 2363, scale five miles to the inch.

CORAL REEFS PLATE 215.



SOUNDINGS IN FATHOMS

PLATE 216.

PLATE 216.

Nomuka group, from A. Chart 471, scale one and one-fourth miles to the inch.

Coral Reefs, PLATE 216.

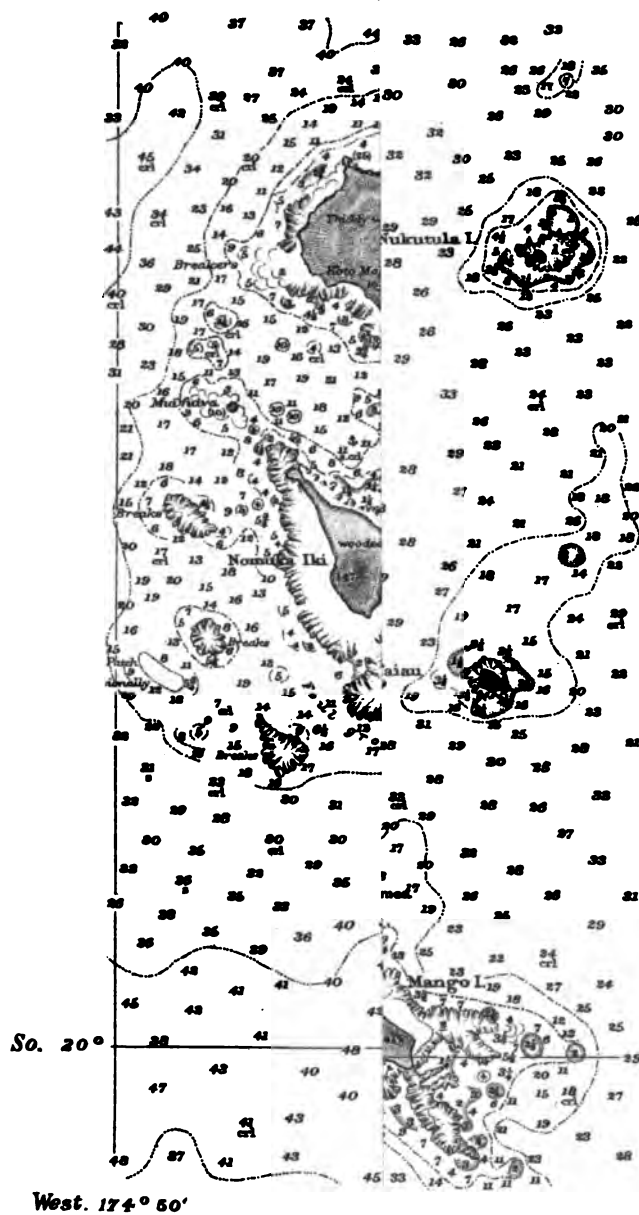
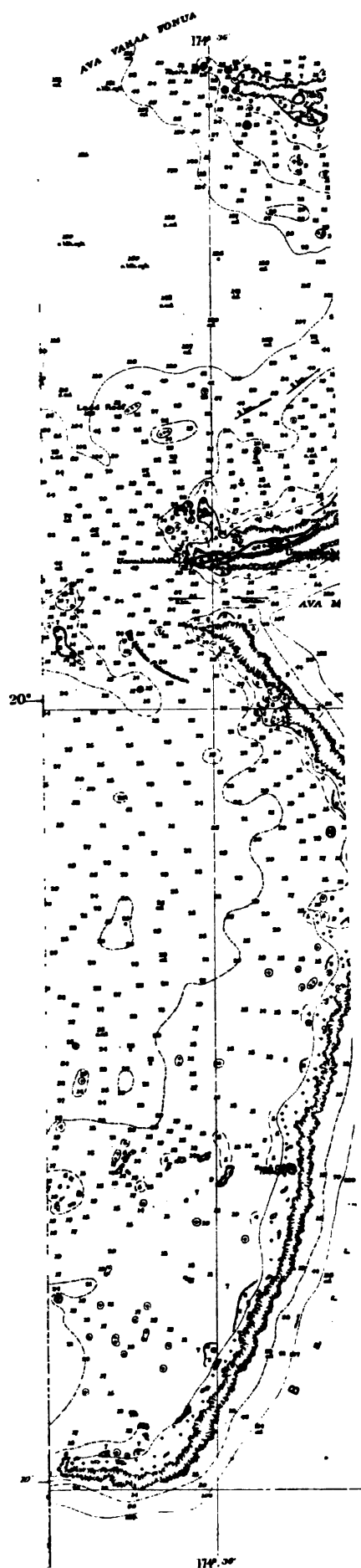


PLATE 217.

PLATE 217.

Haapai group, southern part, from A. Chart 3100.



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PLATE 220.

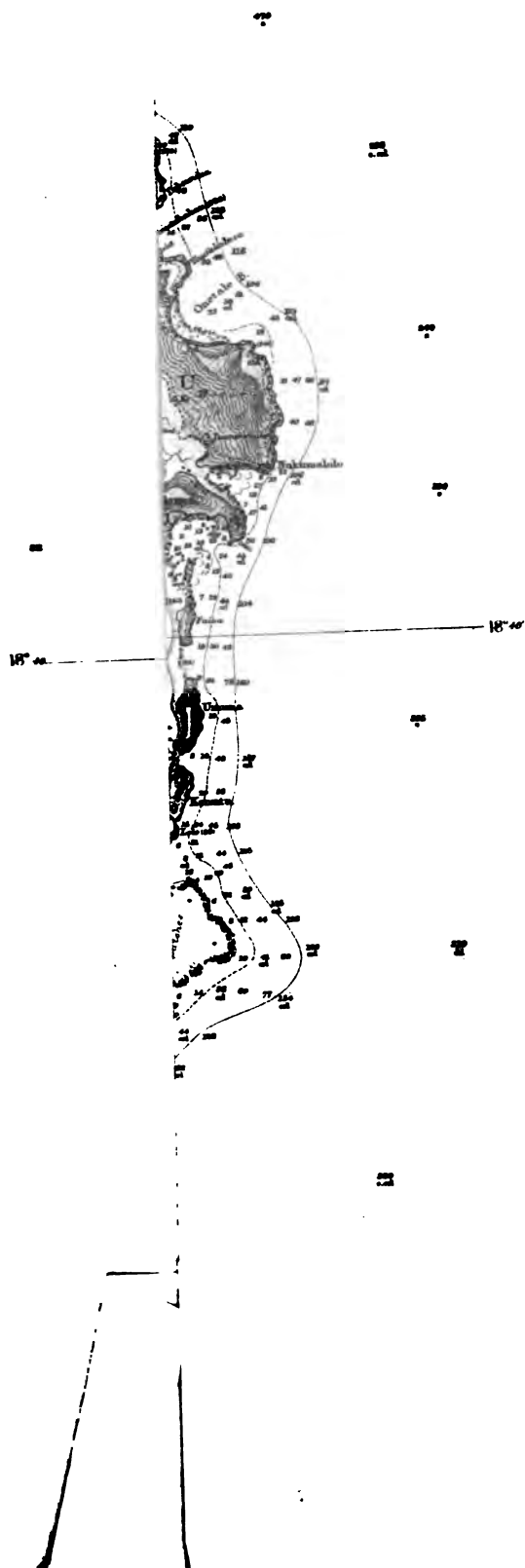
PLATE 220.

The Fiji Islands, from A. Chart 2691.

ALBATROSS TROM

VA

18° 40'



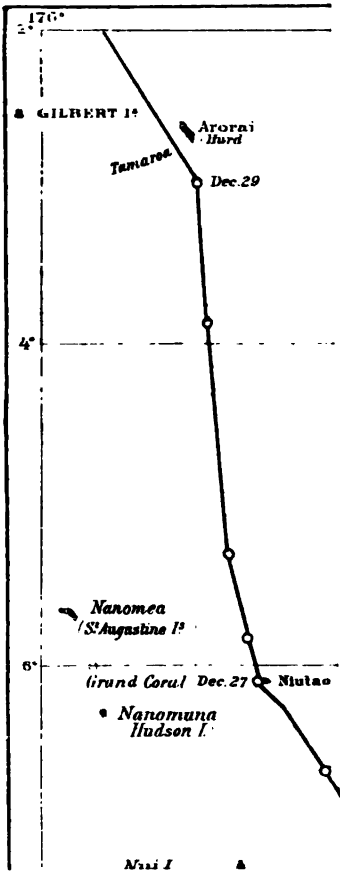
T

PLATE 221.

PLATE 221.

Track of the "Albatross," from the Fiji Islands through the Ellice group.

ALBATROSS TROPICAL PACIFIC EX.



Track of the "Albatro

PLATE 222.

PLATE 222

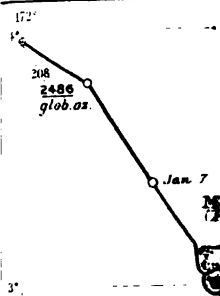
Funafuti, from A. Chart 2983, scale one and one-half miles to the inch.



PLATE 223.

Track of the "Albatross" through the Gilbert Islands.

ALBATROSS "TROPICAL PA"



2°

Apiaianj
(Charlotte)

Taraw
(Cook)
200
93
bro. sh.

1°

Maim
Hail

0°

1°

2°

3°

172°

PLATE 225.

“ “ the “ Albatross ” through the Marshall Islands and to Ponapi (Carolines).

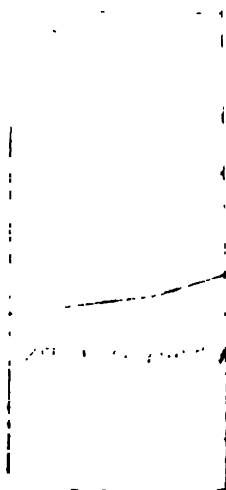
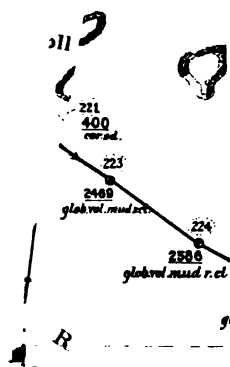


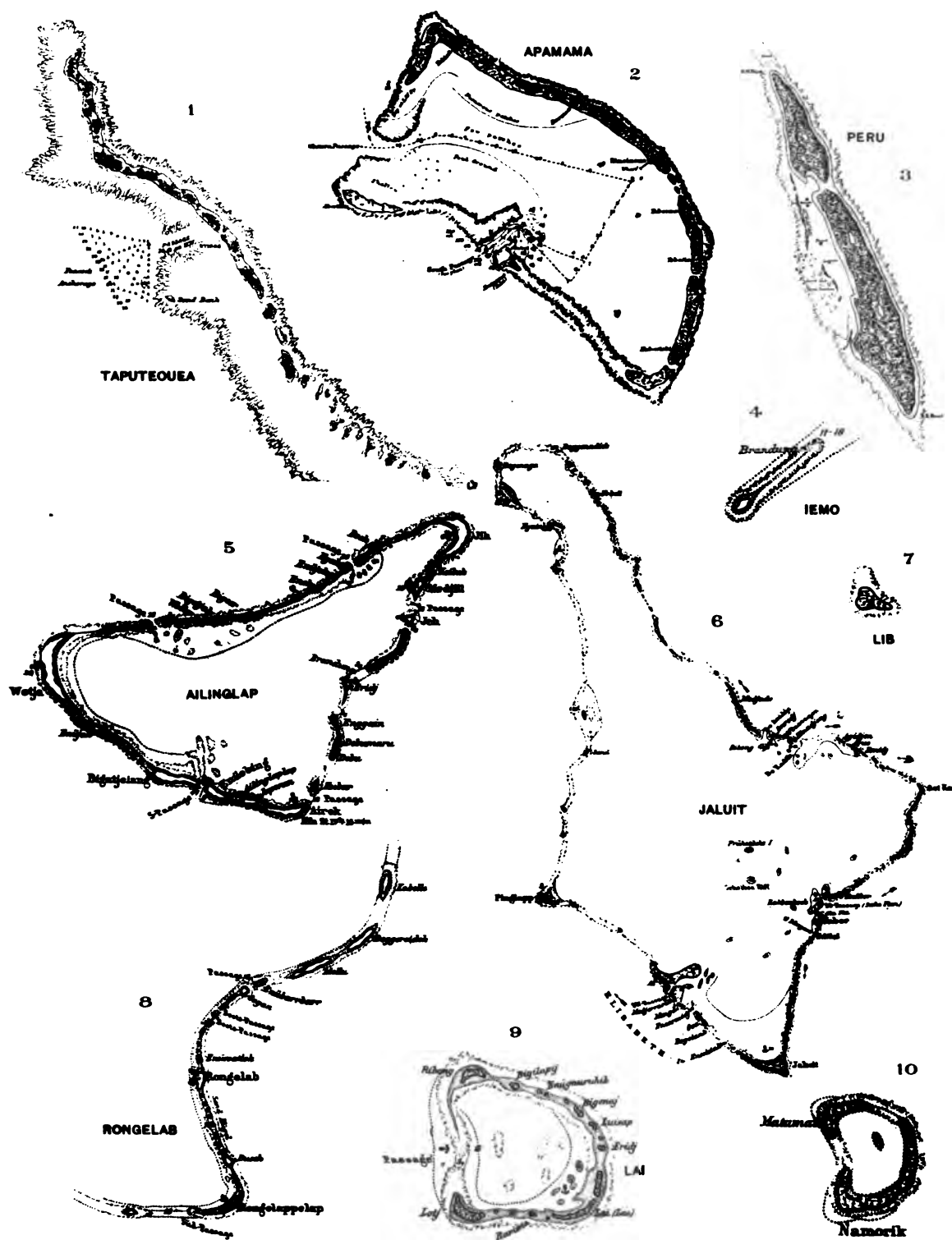


PLATE 226.

PLATE 226.

1. Tapeteuea, from H. O. Chart 120, scale four miles to the inch.
2. Apamama, from A. Chart 731, scale four miles to the inch.
3. Peru, from H. O. Chart 497, scale four miles to the inch.
4. Jemo, from German Hydrog. Bureau, No. 113; scale eight miles to the inch.
5. Ailinglap, scale eight miles to the inch.
6. Jaluit, scale seven miles to the inch.
7. Lib, scale eight miles to the inch.
8. Rongelab, scale ten miles to the inch.
9. Lai, scale five miles to the inch.
10. Namorik, scale eight miles to the inch.

5-10 from German Hydrog. Bureau, No. 113.



12

13

PLATE 227.

PLATE 227.

1. Namu, German Hydrog., No. 113; scale five miles to the inch.
2. Kwajalong, scale thirteen miles to the inch.
3. Taongi, scale eight miles to the inch.
4. Wotje Island (Wotje), scale one mile to the inch.
5. Pingelap, Carolines (A. Chart 772), scale one and one-fourth miles to the inch.
2-4 from German Hydrog. Bureau, No. 113.

"Albatross" Tropical Pacific Ex Coral Reefs, PLATE 227.

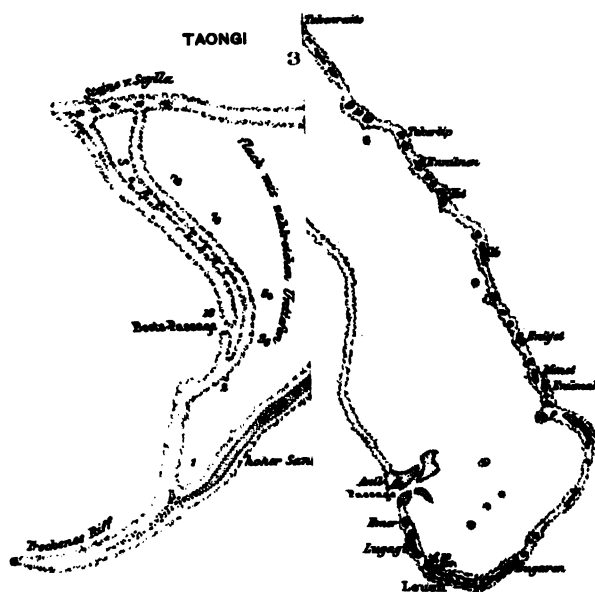
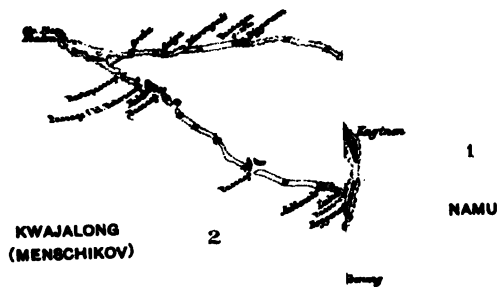


PLATE 228.

1. Wotje, German Hydrog., No. 113 ; scale six miles to the inch.
2. Jaluit, Southeast Pass, corrected by officers of the " Albatross," scale one-half mile to the inch.
3. Likiep, corrected by officers of the " Albatross," scale nine miles to the inch.
4. Arhno, corrected by officers of the " Albatross," scale five miles to the inch. An excellent sketch of Arhno has just been published by the German Hydrographic Bureau (1902).

2-4 from German Hydrog. Bureau, No. 113.

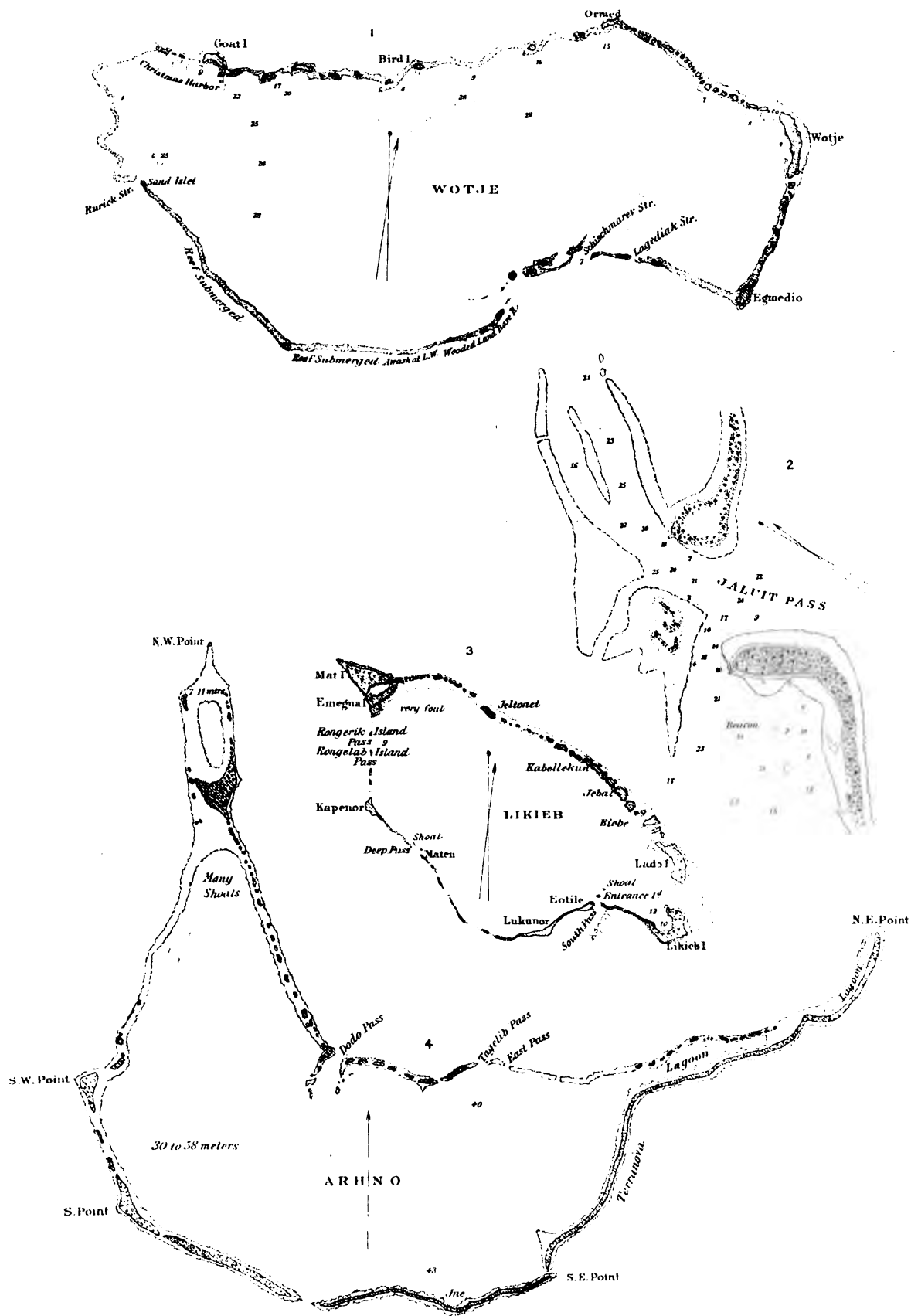


PLATE 229.

PLATE 229.

Kusaie, or Ualan, Carolines, from A. Chart 878, scale one and one-fourth miles to the inch.

Coral Reefs, PLATE 229.

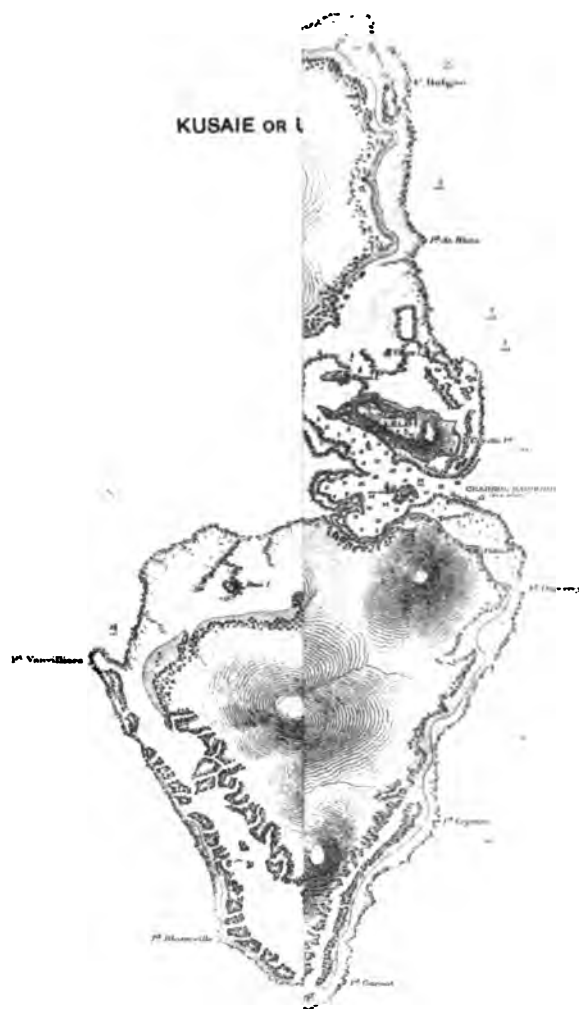


PLATE 230.

Ponapi and the Andema Islands, from A. Chart 981, scale four and one-fourth miles to the inch.



PLATE 231.

Truk and the Royalist Islands, from A. Chart 982, scale seven miles to the inch.



PLATE 232.

PLATE 232.

Track of the "Albatross" west of Ponapi, through Truk to Guam.

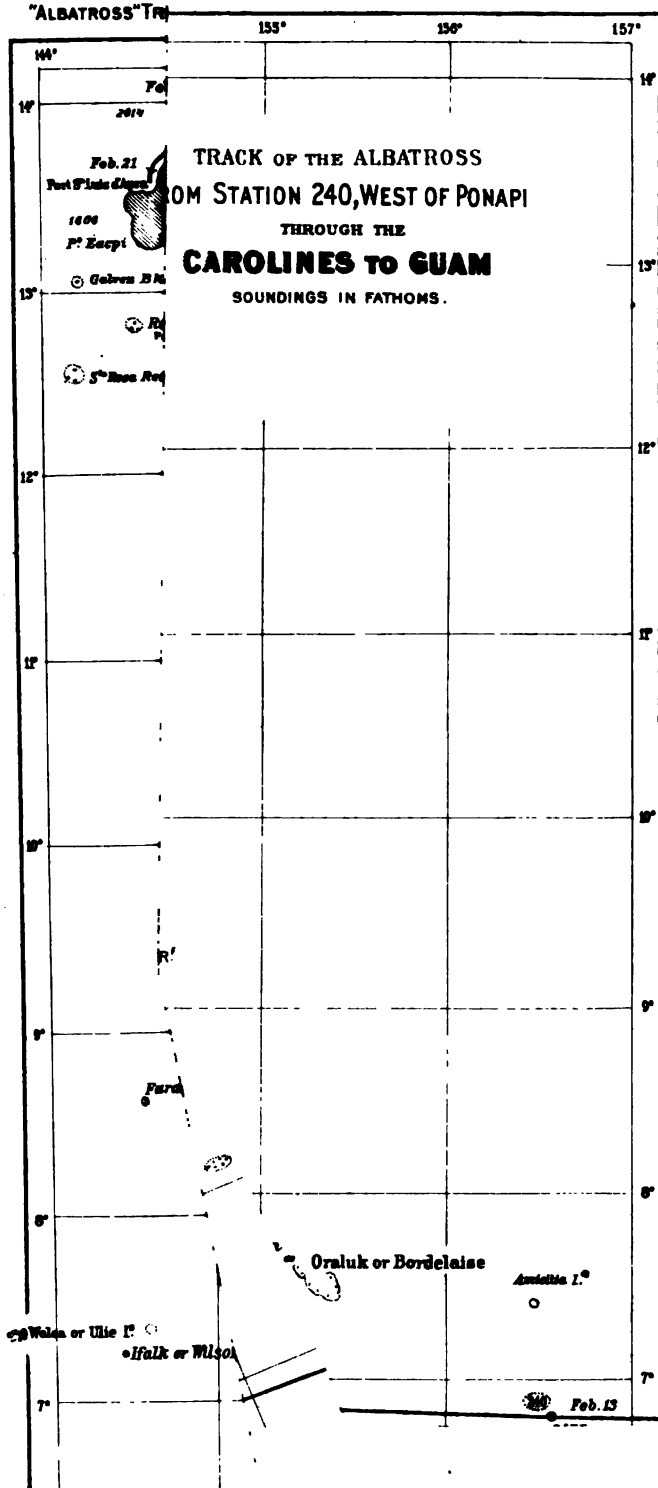


PLATE 233.

1. Namonuito, from A. Chart 772, scale twelve miles to the inch.
2. Feys, or Tromelin Island, from A. Chart 772, scale three fourths of a mile to the inch.
3. Losap, from A. Chart 982, scale two miles to the inch.
4. Guam, from A. Chart 1748, scale six miles to the inch.
5. Rota, from A. Chart 1748, scale three miles to the inch.

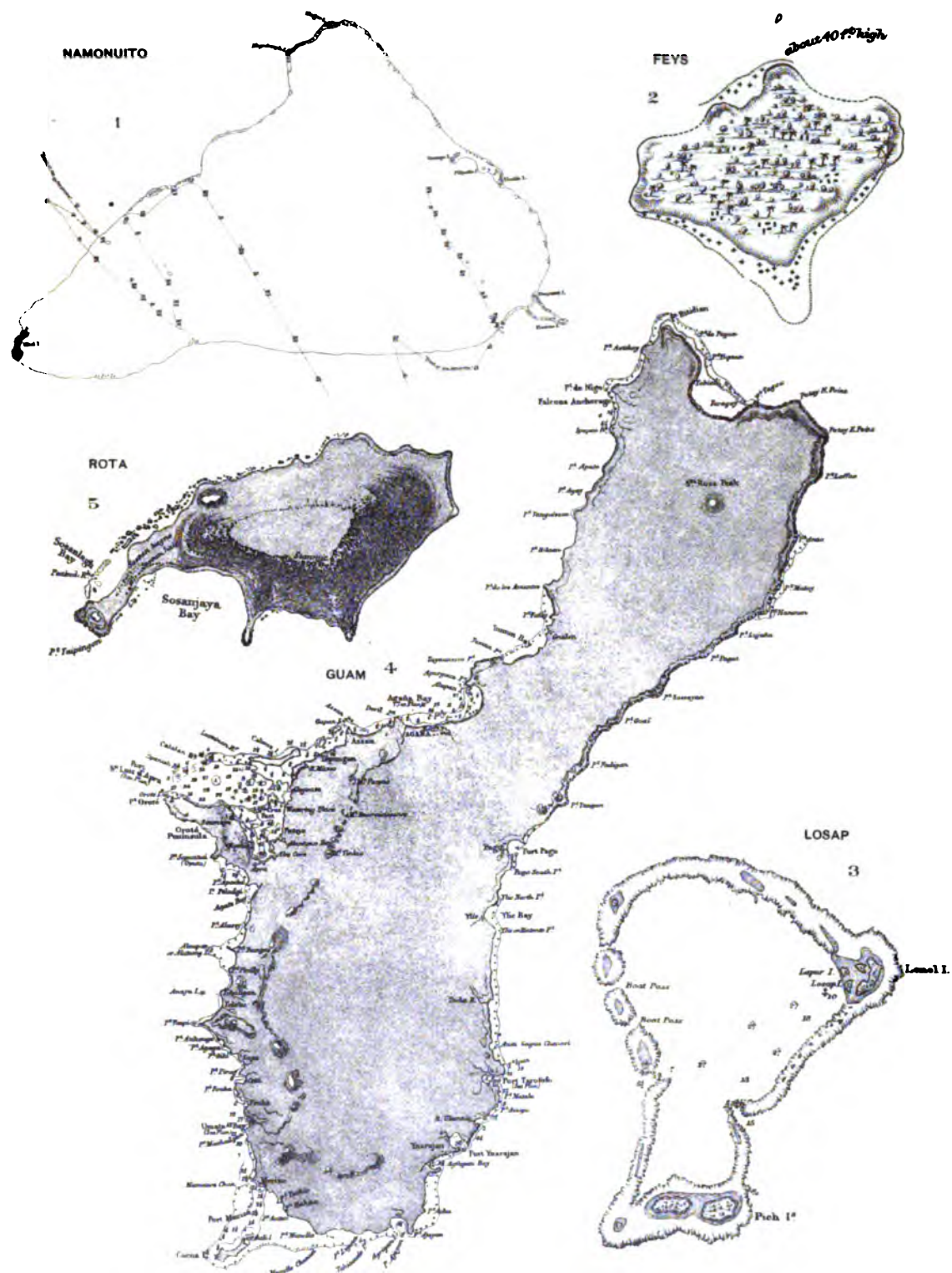


PLATE 234.

PLATE 234.

Geological Chart of the islands in the tropical Pacific:

Yellow, coral reefs, underlying base not known.

Blue, volcanic islands.

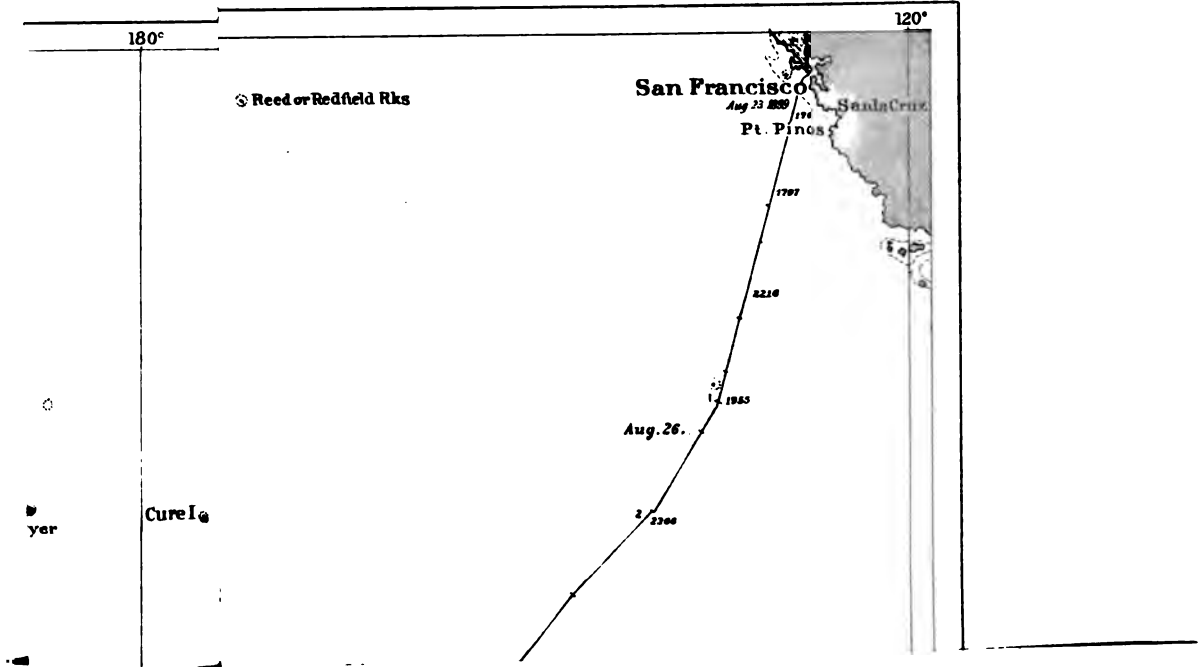
Carmine, elevated limestones.

Blue and carmine, volcanic islands surrounded by reefs, partly elevated.

Green, coral reefs, probably underlaid by rocks of nearest land.

Blue and yellow, volcanic islands surrounded by encircling reefs.

CORAL REEFS, PLATE 234.



Ilao or Pa
Ang

PLATE 235.

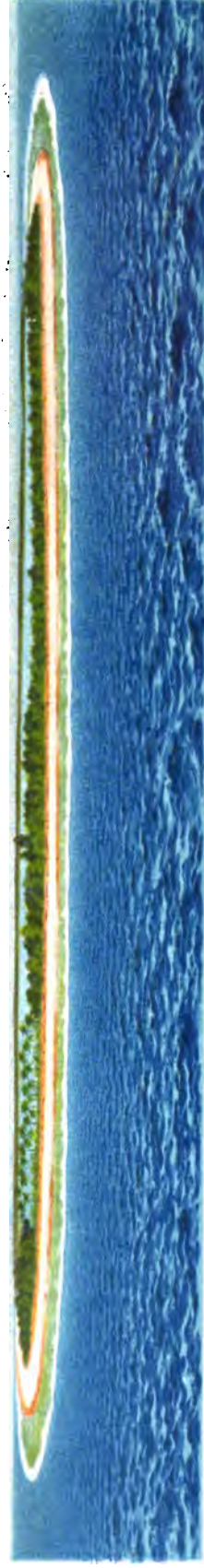
Bora Bora. Drawn by J. H. Emerton, from sketches by A. Agassiz and A. G. Mayer.



PLATE 236.

PLATE 236.

Pinaki (Whitsunday). Drawn by J. H. Emerton, from sketches by A. Agassiz and A. G. Mayer.





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